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How Edwards, a report.

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IRISH TRANSATLANTIC PACKET STATION.

REPORT OF THE DUBLIN COMMITTEE CONSIDERED,

AND

MR. WHITESIDE'S STATEMENT REVIEWED,

WITH

REMARKS ON THE RELATIVE ADVANTAGES

OF THE

SHANNON AND GALWAY BAY.

"I did not fail to remark the capacities of your noble river, navigable by steam for two hundred miles. I also made such observations as I could in our rapid passage on the Harbour of Foynes, which seemed to me capable of being reached at any time of the tide, and of affording shelter, with a sufficient depth of water, to the largest ships. I observed also a pier and a wharf for large steamers, and I was particularly struck with the magnificent dock under construction at Limerick, which when finished must prove of the greatest advantage to your interesting city."—HON. ABBOT LAWRENCE, *Minister for the United States.*

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1852.



IRISH TRANSATLANTIC PACKET STATION.

THE Report of the Committee appointed last August in Dublin, to inquire into the expediency of forming an Irish Transatlantic Packet Company, has now been some weeks before the public, and the readers of that important document cannot fail to observe the intelligence and general impartiality with which the inquiry of the Committee has been conducted, and, what is of equal if not still greater importance, the prudent conclusions with which they have terminated their labours. The Committee, it appears, have collected information from every source, and after a deliberate and calm inquiry, they have arrived at the conclusion, that the general question of the expediency of a Packet Station on the coast of Ireland admits of no reasonable doubt; that the mode in which the subject had been treated by the late Packet Station Commission did not possess the confidence of the country; that topics of paramount national importance have been overlooked; and the interests of this great commercial empire, no less than those of the whole civilized world, demand the early realization of this project. As regards the expediency of forming an Irish Steam Packet Company, with a capital of £500,000, as suggested by the Dublin Meeting, it should be remembered, that two powerful Companies at present exist in Liverpool alone, subsidized by their respective governments, having a well appointed fleet of steamers, and that for a new association to rush into unequal competition with companies so sustained, would be most unwise;

that without the support of the state, granted for the transmission of the mails, (an object fully justifying the appropriation of national funds,) it would be most hazardous; that the safest course appeared to be, to test the question by the experiment of a first-class vessel, in order to convince the Government and the English people by the practical result; and that although this would be productive of some delay, yet that such delay was preferable to a contest, premature and unequal, leading to defeat. Such is the result of an inquiry, conducted by men of high mercantile character, and the country will read their Report with deep interest, and will feel bound to acknowledge a debt of gratitude to the Committee for the patient and laborious attention which has been bestowed upon the inquiry.

But whilst the Report itself is distinguished by all the impartiality which the supporters of the different rival ports could desire, it is much to be regretted that the interests involved in a question, upon which the people of Ireland have so strongly fixed their hopes, should have been risked by the indiscreet zeal of a member of the Committee, who, displaying the ingenuity of an able advocate, where the faculties of a judge would have been more appropriate, has applied his high talent in pleading the cause of a particular port, with all the zeal which he could have displayed for his most favoured client. However highly his professional abilities are estimated, the public, in a case like the present, would prefer the testimony of one experienced navigator or scientific engineer, to all the subtle sophistry of the Four Courts, or of Westminster Hall. Nor is the learned gentleman's want of nautical or engineering knowledge supplied by local information; for it does not appear that he has ever visited the Shannon, against which noble estuary he so dogmatically decides.

The resolutions of the public meeting clearly define the subject of inquiry referred to the Committee, namely, the consideration of the general question, of a western harbour, without reference to the selection of any one particular port; for the determination of which latter point, it was quite obvious the Committee were not a competent tribunal. It was a question demanding the utmost skill of the engineer, and the experience of the seaman; but yet

here we find a learned gentleman, necessarily more familiar with points of law than with the points of the compass—with the dicta of judges, than with Admiralty charts—with the orders of court, than with sailing directions, who “rushes in where pilots fear to tread.” Had the learned lawyer listened to the friendly advice and gentle remonstrance of the distinguished commercial gentlemen, his colleagues in this important inquiry, it would have been more prudent. *Cuivis creditur in arte sua*, is a wise legal maxim; and if the experienced mercantile members of the Committee had undertaken to determine an abstruse question of the law of real property, it is not very likely that they would have increased their high and well merited reputation. A careful summing up of the evidence taken before the Commissioners would, indeed, have been most important. But this would have been the function of a judge, and not that of an advocate. To weigh the claims and defend the rights of Ireland was surely a nobler office than to appear as counsel for the Ten Tribes. It is true the Committee have found themselves compelled publicly to disown any participation in the report offered to them by their learned colleague, and the author might, under ordinary circumstances, be left to the inferences suggested by their disclaimer; but where a report is circulated on the authority of a high name—a report which, professing to deal with facts, quotes exclusively from the evidence which answers its own purpose, it becomes indispensable that the public should have the fairest opportunity given them of weighing the testimony on the other side of the question.

Before proceeding to examine the report presented by the learned advocate, but treated somewhat uncere- moniously by the Committee, it may be well to state, that the whole of the Committee were invited during their inquiry, to visit the two ports, of the Shannon and Gal- way, selected by the Royal Commissioners as possessing the highest qualifications for Transatlantic purposes. Almost all the members of the Committee took advantage of this opportunity of making themselves acquainted with our harbours: in this tour of duty they were, however, un- aided by their learned brother. When some authentic documents respecting the siege of Malta were offered to

the historian Vertot, he rejected them, saying, "*mon siège est fait*." His report was already written. "Facts," says the proverb, "are stubborn things," and therefore are, like other stubborn things, better avoided. But where facts are avoided, it is somewhat rash, that a conclusive opinion should be expressed. In the present case it should be borne in mind, that it is the very individual who disdained to visit our ports, and to whom their capabilities are even still unknown, who separates himself from his colleagues on the Committee, and presents himself to the public as the fittest person to adjudicate between the nautical advantages of different harbours.

The course adopted by the learned gentleman presents a contrast with the more comprehensive views of Lord Monteagle, whose letters appear in the appendix to the Report. It surely would have been more logical to have exhibited the injustice done to the general case of Ireland by the Commissioners' Report—an injustice done by their errors, and still more by their omissions—than to have undertaken the more limited and less generous task of advocating a local interest. The foundation of all expectation of success lies in demonstrating that it is for the interest of Great Britain as well as of Ireland, of our noble Colonies no less than of the United States, that the acceleration of the correspondence should be effected without delay. This was a service to Ireland which it would have been glorious to have accomplished, and creditable to have attempted. It would have been a work worthy of a patriot and a statesman. This great opportunity was unfortunately missed by Mr. Whiteside; and his error, besides producing other evils, has rendered this somewhat controversial reply indispensable, for where one party has spoken, it is but justice that the other should be heard.

In stating the grounds upon which Mr. Whiteside bases the claims of Galway "for the approval or disapproval of his fellow-citizens," much stress is laid upon an imaginary network of projected railways, put forward for public notice and patronage. These railways, it appears, are to radiate from Galway as a centre, and are to extend in all directions throughout the country: one of eighty-one miles in length to Armagh; another of forty-five miles to Londonderry; another, about sixty miles, to Limerick; another of fifty

or sixty miles to Sligo ; the whole involving an expenditure of about two millions and a half sterling—a startling estimate to provide for, in the judgment of practical men like the commercial members of the Committee who inquired into this subject in Dublin. But two or three millions form but a slight obstacle in the eyes of this zealous advocate. He describes these lines as if they were at present in actual operation, and adding the functions of the poet to those of the lawyer, confounds the past, present, and future. These lines, for the most part, would run in directions transverse to existing lines of traffic, where scarcely the humblest vehicle that plies upon our common roads finds support. Moreover, one of these lines, (that to connect Mullingar or Longford with Armagh,) would run almost in the very track of a line of canal, more than forty miles in length, which is at this moment in process of construction by the Government, to unite the Shannon at Leitrim with Lough Erne at Belurbet, and by this means to supply the only link wanting to connect the navigations of the north with those of the south, and to bring into direct communication Belfast and Limerick, together with all the intermediate towns in both provinces. A considerable portion of this line is now traversed daily by swift steamers, and it is obvious that any line of railway in that direction would not only affect important private interests, such as the Ulster Canal, &c., but would render useless a large public outlay, at this moment appropriated to the formation of this new “Junction Canal.” What is, however, a more general and cogent objection is, that the traffic in this case proposed to be forwarded is already provided for.

But in order more fully to appreciate the folly of this scheme, it is only necessary to recal the struggles and expenditure of capital that have been made, during the last few years, to connect the chief towns of the country, and that even to this day, the line between Dublin and Belfast, the two most important towns in Ireland, remains incomplete, although years have elapsed since the parliamentary powers for its construction were obtained. The proprietors of this line will, doubtless, after so long a struggle, look forward, on its completion, to the traffic that will arise in the event of the establishment of a packet

station on our shores, and will watch, with jealous anxiety, any rival to their legitimate interests in this traffic; whilst the public will naturally inquire, why so large an expenditure as that now in progress in forming the Junction Canal, should be paralysed by the suggestion of a system of unproductive railways. Besides, the completion of these lines at so vast an expenditure, would not accelerate the intercourse between Belfast and Galway more than an hour and a-half, the difference of distance between the proposed direct route and that *via* Dublin, being, according to this writer's own showing, only forty-seven miles; and as, on the same authority, the difference in time between Belfast and Galway and Belfast and Foynes, amounts to only a few minutes, it is clear that, considering the question in reference to the communication with the north of Ireland and Scotland, these two ports stand at present on a par. But if the question is to be considered merely in its action on particular localities, there can be no difficulty in showing, that if Belfast could be brought, with this large expenditure, nearer to Galway by one hour and a-half, (between which towns there is not at present any trade whatever,) yet, by adopting the Shannon, all the advantages proffered to Scotland, Belfast, and the metropolis of Ireland, may be preserved and augmented, with the saving of some millions, and at the same time, London, Gloucester, Bristol, and the whole of the southern district of England, can be brought much nearer to the Atlantic by Limerick than by the Galway route; thus giving to the seat of empire, and to the whole of northern Europe, an advantage in postal communication greatly exceeding any proposed by the rival scheme. Before the close of the ensuing summer, a continuous railway communication is expected to be completed from London to Milford, and a corresponding communication will even sooner be completed from Limerick to Waterford on the other side. It is obvious, then, that if we look to what has been and what may hereafter be accomplished, the Shannon presents in this respect, as in every other, much greater advantages than any other port, facilities which will besides be increased within a short period, and comparatively at a small expense.

But we can afford to treat the subject on the simpler basis of existing arrangements, without condescending to

avail ourselves of the advantage resulting from an exposure of the speculations connected with the railways proposed to radiate from Galway. We believe that the important object we have in view, will be best arrived at by the least disturbance of existing arrangements. We also plead guilty to the national weakness of attaching importance to the claims of Dublin, and of bestowing on the metropolis of Ireland, some greater consideration in this question than Mr. Whiteside condescends to grant. The rejected report disregards this question altogether. It does more; it sets aside the claims of Dublin as unimportant. Standing as high as it does among the great commercial ports of the empire, in shipping, exports, imports, and revenue receipts,* Dublin possesses facilities, as well as indispensable accommodation, for carrying out, as from a central point, an extensive service of this description, which it would be difficult to find elsewhere. Whether the River Shannon or Galway Bay (the two harbours selected by the Packet Station Commissioners) is ultimately chosen, Dublin must ever be regarded as the great central point for all the chief towns of England, Scotland, and Ireland, and, as has been shown, the two ports of Foynes and Galway may be regarded as equi-distant from this centre, they are therefore equally eligible, in this particular, in reference to all other parts of the empire.

The evidence of Mr. Mulvany, one of the witnesses examined before the Packet Station Commissioners, is strongly relied on by the learned advocate, but the bias of this witness's views lessens the weight of his opinion. This witness's plan for connecting the Midland Railway with the Kingstown line, in order to obviate the delay and inconvenience of changing to and from the different trains, is put forward as of much importance in

* REVENUE RECEIPTS.

	£.
Dublin.....	933,575
Belfast.....	346,426
Cork.....	256,590
Limerick.....	186,182
Waterford.....	119,393
Galway.....	31,676

Yet Mr. Whiteside would sacrifice Dublin to Galway!!

the question. The merits of this plan will be best judged by the citizens of Dublin. The Midland line is proposed to be connected with the Drogheda line by a branch formed at the north side of the city, and from the station of the latter line, the connexion with the Kingstown Railway is to be accomplished by a "high level bridge." This bridge is proposed to cross the Liffey *below* the Custom House, from thence passing near St. Mark's Church, to join the Westland-row station. Now, it may be necessary to describe what a "high level bridge" is: it signifies a bridge built of a double tier of arches, one tier standing over and upon the other—that above to carry the railway, and that below for the common road traffic. Let us imagine the erection of this enormous bridge and its embankments, some fifty or sixty feet above the river and quays and their adjoining streets, crossing below the Custom-house, and cutting off all the shipping from that point, and the whole of the docks, besides totally disfiguring one of those beautiful buildings which are the ornament and pride of the city, and interfering with the valuable private property through which it must traverse, as well as that extending along both sides of the river to Carlisle bridge, where the shipping reaches at present. Compare this with the easy connexion that can be formed between the Great Southern and Western Railway and the Kingstown line, by a branch along or near the line of the Grand Canal, and which would afford means of improving a neglected district of the city, instead of disfiguring one already highly improved, and materially damaging the port.

In like manner the Great Southern and Western Railway can be connected with the Midland line by a small bridge across the Liffey *above* the city, and thence to the Drogheda Railway, which connects with the northern lines. These connexions are simple, and bear a striking contrast with the complicated and expensive arrangements necessary to connect the Midland Railway with the Kingstown line, and would complete in all respects the connexion of all the railways radiating from the city, whilst the other plan would form only a partial connexion of the various lines, leaving some of them still detached from all the others, as at present. We submit this question to the citizens of Dublin, who can best decide whether it is of advantage to the city that the

upper part of the port and all the docks should be deprived of all access in future to the shipping, and the whole port disfigured in the way proposed by this "high level bridge." Indeed, it is quite clear that it would be difficult to conceive any arrangement more injurious in its consequences to the city of Dublin.

We now proceed to notice the extracts made by Mr. Whiteside from the naval evidence given before the Transatlantic Packet-Station Commission.

The following extract from the Commissioners' Report is first given by the learned author:—

"We are of opinion that the harbour of Galway and that of Foynes, are those best adapted for a North American Packet Station: of the two which we have selected Galway, *were the requisite works constructed*, would be most free from objections of a nautical character."

What these "requisite works" are will be noticed hereafter. But our impartial author feels no compunction in omitting the continuation of this extract, for it obviously does not suit his advocacy. We must supply this omission. The Commissioners in continuation state—

"It should be observed, however, that Limerick, from which the Railway could at small expense be continued to Foynes,* occupies at present a more central position than Galway, as regards Railway communication, Limerick being connected by Railway with Cork, Waterford, and most of the principal towns in the south of Ireland, while Galway cannot be reached by Railway either from the south or north of Ireland, except by way of Dublin."

This clearly determines the superior central position of the Shannon for this object, over all other ports, even under existing arrangements, without reference to the other routes already referred to. Here, therefore, are two conclusive deficiencies admitted by the Royal Commission to exist in Galway—the first, the want of a sufficiently protected harbour; the second, its deficiency of railroad communication. This statement should never be lost sight of.

But in considering a question of this nature, the object

* A Company is now formed to carry this short line into effect, the plans of which are lodged for the sanction of Parliament this session.

of paramount importance is the nautical capability of the harbour, for it is obvious that without a suitable haven for the large and valuable steamers required for this service, enabling them to ride in safety at all seasons, and providing accommodation for their maintenance and repair, the amount of railway accommodation, even if it existed at Galway, would only be of secondary importance.—The naval evidence appended to the Commissioners' Report thus becomes vitally important, and we propose to follow our author very fully into this branch of his inquiry.

Captain Bedford's evidence affords the reporter an opportunity of making copious extracts, but to the first question put to this gallant witness his answer is, that Galway is the only port upon which he can give any opinion. He was once in Cork, never at Long Island, never at Crookhaven, once at Berehaven, "but many years ago," never at Valentia, once at Tarbert, never at Foynes, never at Dunmanus Bay, but at Galway "frequently, and at all "times between April and November for the last six years." Subsequently he states, in page 56, "I have not navigated "this coast during the winter season." Hence it appears that the first witness presented is totally unacquainted with the different ports, on the comparative merits of which it is the learned advocate's object to decide; and even as regards Galway, the only port with which he is really familiar, the witness knows nothing whatever of it as a place of shelter or safety during the winter half of the year. The reader will judge, therefore, to what extent he may rely on the learned advocate in selecting evidence fairly; more particularly as in the same document in which Captain Bedford's evidence appears, there is contained the evidence of about forty naval and Coast Guard officers, as well as other sea-faring men, a large proportion of whom are well acquainted with most of the harbours in question, and but few of them that do not thoroughly know both the Shannon and Galway, the two ports singled out by the Commissioners for this object. At page 91, this leading witness, so peculiarly well informed on this subject, exclaims, "Comparing the several "ports under consideration, where is the one whose natural "facilities equal Galway, or in which there is a less demand

“for artificial works to render it both a magnificent harbour and an eligible port for Transatlantic communication!” This is doubtless very high sounding, but the reader has already seen that the witness is, according to his own written statement, wholly unacquainted with any of the harbours with which he draws this comparison; and yet such is the testimony which our author submits to the “approval or disapproval of his fellow citizens.” His opinion is plainly not worth a jot for deciding the relative capabilities of the different ports. We shall have hereafter an opportunity of knowing the extent of the “artificial works” which this witness himself declares necessary at Galway, and which he treats so lightly, and in the mean time, as he professes to be well acquainted with Galway locality, we shall see what he states of the fitness of the dock and port for a Transatlantic Packet Station. At page 9, in answer to the queries of the Commissioners, he admits that “Galway dock is *not capable of receiving vessels of the class of the Transatlantic packets*, drawing $19\frac{1}{2}$ feet water. It has a clear entrance of 54 feet,” [70 feet is the minimum breadth required for the British steamers plying to America, and 80 feet for the American steamers,] “an area of rather more than five acres, and a depth of from 14 to 17 feet *at high water spring tides*.” So much for the Galway dock, which, it is clear, is, even in the highest tides, quite deficient in depth for any purpose of this kind, and also altogether too narrow for this object. Furthermore, a glance at the Admiralty Chart, produced by this same witness, will show, that for a distance of nearly half a mile from the port and dock, out towards the roadstead, the depths at high water, are no better than the 14 to 17 feet above given; so that the approaches to the port are altogether inaccessible even at high water, except for vessels of moderate draft, and are nearly dry out at low water.—There is accordingly absolutely no existing port or dock at Galway for this purpose. In pages 58 and 59 our learned advocate professes to give what he denominates “defects” in the Bay of Galway, which he takes from Captain Bedford’s evidence, enumerating the dangers to be apprehended in approaching the anchorage. The “Black Rock” on the north, and the “Marguerita Rock” on the south, are mentioned; on which latter he states “there is only 11 feet

"in depth at low water, with a long shoal extending half a mile to the westward." The chart of the bay will best shew the nature of these "defects," with numerous others, of which there is no mention. But all allusion to the same witness's evidence, as given in page 9 of the Appendix, is avoided, where we find that "during heavy westerly winds the sea which sets in might occasionally be such, as to prevent communication with the shore by means of an auxiliary steamer, of the size necessary for entering the river where a landing could be effected." We therefore can conceive the predicament in which the mails and passengers would find themselves under such untoward circumstances, after a long voyage. But to obviate these difficulties, a sea pier or break-water is proposed to be run out from Mutton Island into the deep water, so as to cover the roadstead; but the witness adds, that "*much more than this would, however, be necessary to convert the roadstead into a suitable harbour for commodious mercantile transactions.*" We are not told what the nature and extent of these additional works are to be, but after this great sea pier is erected, which is to throw off the "heavy sea that sets in during westerly gales," still, "much more" than this would be required to convert the roadstead into a suitable "harbour;" so that it clearly appears, that after all this high sounding approval of this harbour, in the judgment of the leading witness Galway possesses only a wide exposed roadstead, without shelter, and totally without harbour, dock, or port;—yet we are gravely and triumphantly asked by this very witness, "where is there a harbour in which there is less demand for artificial works to render it both a magnificent harbour, and an eligible port for Transatlantic communication?" It would scarcely seem necessary to proceed any further than this evidence to determine the capabilities of Galway Bay; but we shall proceed with the nautical evidence brought before us by the learned author of the rejected report. The next witness is Captain Wingrove, R.N., from whose evidence a short extract is given, from page 60, in reference to objections made against Cork; but our author, in his eagerness to find fault with other harbours, omits all mention of what this witness states of Galway and other ports. For instance, as to Valentia, he states that it is "the most com-

“pletely land locked harbour on the coast; water smooth and deep, with firm holding ground.”—“Tarbert in-
different, with twenty-five miles of difficult navigation.”
“*Galway at the bottom of a deep bay, much exposed to
westerly winds.*” In vain do we seek throughout this witness’s evidence, for the preference which it is intended to be conveyed that he gives to Galway; on the contrary, his remarks are more condemnatory of that port than of any others, being exposed to all the prevailing winds, and at the bottom of a deep bay, with a bad lee-shore; but we shall see by and by what the other naval witnesses say on the same subject.

Lieutenant Turnour, R.N. is next quoted, and first, an important part of his evidence is omitted, namely, his reply to query 4, page 22, in which he states, that the first land-fall to be made on the coast of Ireland when coming from the west, bound either to the Shannon or Galway, is the Skelligs light and then Loop Head. Let the chart of the coast be examined, when it will be seen that if bound for Galway, the vessel must, after sighting the Skelligs, continue a coasting voyage for miles, and absolutely pass the mouth of the Shannon, which will be proved hereafter, on the authority of naval evidence, to be the best and most complete harbour on the coast. Yet this harbour is to be passed, and an additional and dangerous navigation risked, in order to reach a harbour which this same witness altogether condemns. The witness is perfectly correct in naming the Skelligs as the first object the mariner seeks for, in coming from the west, for this obvious reason, that it is the first “land-fall” on our whole coast, and is besides the most western point of the European shores. This remarkable land-fall is therefore very conspicuously lighted, and no seaman will approach any part of the west coast at night or in hazy foul weather, without first sighting this point. Having reached the Skelligs, his course leads him direct to the Loop Head light, standing on the conspicuous headland of that name, which marks the mouth of the Shannon. That noble river, which Spenser describes justly as “spreading like a sea,” at once presents him with a safe and commodious haven, without encountering further danger or delay. Though this is an advantage apparently beyond the com-

prehension of a landsman like our worthy author, it will have its due weight with the seafaring reader, especially if at all acquainted with the west coast of Ireland.

To the next question (No. 5) the same witness continues—

“A vessel of 19½ feet draught would have to anchor in Galway Roads, although there is a floating dock and another in course of construction, *yet not even at high water spring tides could a vessel of such a draught approach within a quarter of a mile of the docks. Neither could mails, passengers, or goods be at all times landed or embarked from the Roads. I have been prevented by the wind and sea for upwards of twenty-four hours from communicating with the shore, and could only then during a lull at low water, when shelter was afforded my boats by the uncovering of the rocks off Mutton Island; even at low water springs, neither goods nor passengers could at present be landed, either with rapidity or convenience, though the weather be fine.*”

In giving the evidence of this witness, is it not a little singular that the learned reporter did not direct the attention of his readers to this remarkable answer? But let us turn our attention to the same witness's evidence in page 96, where we are told that Lieut. Turnour lay in Galway Bay, in command of her Majesty's steamer the “Shearwater,” for several weeks, on three different occasions; that, in his own words, “during the first period he had to let go a second anchor, and ride with two anchors a-head upon nineteen different days, and twice had to steam up in readiness to assist the anchors.” “The second period” (during one month) “had two anchors a-head twice.” “The third time stationed, had seven times to let go a second anchor.” He answers to query 6, “What wind throws in the heaviest sea?” “The wind from south by west to west by south.” To query 7, “How many days have you been unable to land with safety and dry?” “So many that I cannot state how often, but I have been three weeks at a time without landing, on account of the uncertainty of getting on board quite dry.” Let the reader only imagine himself lying on board a steamer within shot of the shore, and not to be able to effect a landing during three weeks, and with the further fact that even though the weather be fine, a landing could scarcely be made. Why the gallant commander might

have crossed the Atlantic to America to provision and coal his ship, and have returned to Ireland in that period! May not the reader fairly ask why this striking evidence was not even alluded to; but doubtless these untoward circumstances were set down to the "defects" in the harbour, and were passed over as not worth noticing. We, however, could continue to make extracts having a similar bearing from this witness's evidence, showing that no landing whatever can be made in the town, in any state of the wind at low water, nor coals taken aboard, except during the most favourable weather and at particular points of the wind; but enough has been given to show the manner in which the evidence has been dealt with in this statement, which appeals for the "approval or disapproval of the public."

The evidence of Commander Kelly, R.N. is next noticed; but in stating this witness's opinions, no notice is taken of his admission that he knows nothing whatever of the Shannon, and that in comparing Cork and Galway, his evidence is altogether in favour of Cork. Throughout all his answers to the various queries, he gives the preference to Cork over any other Irish port that he is acquainted with, and he states he knows Galway, but not the Shannon.

Mr. Patrick O'Halloran, Commander Burke, R.N., and Lieutenant O'Malley are next noticed. O'Halloran is the Galway pilot for the last twenty-six years, and we can have no difficulty in anticipating the preference he would give for the locality with which he has been so long connected. Commander Burke says, that all the harbours on the coast are excellent, not particularizing Galway more than any others; he has steered out of all of them at night, but was never in them in a steamer. Lieutenant O'Malley is a native of Galway, knows nothing of Foynes, was never in the Shannon but twice, when he merely entered its mouth, and was five hundred times in Galway, and, doubtless retaining the early and endearing associations of his youthful days, which are connected in his mind with that locality, he gives it the preference over all others.

The next evidence is that of Lieutenant Broad, R.N., and the only extract we get is simply thus: "I am of opinion that steam vessels once inside the Arran Islands

"could approach Galway Roads at all times without danger." Now this witness states that he was nearly three years cruising on the coast of Ireland, "from November, 1846, to June, 1849," and the obvious intention in giving the above brief extract from his evidence, was to convey the impression that Galway was the best port in his opinion; but we shall afford the reader an opportunity of seeing what this witness's opinions are, by giving nearly the whole of his evidence.

In answer to query 3 he states, that he was three times at Cork—never in Long Island—never in Crookhaven—once in Berehaven—never in Valentia—stationed twelve months in Tarbert—three or four times in Galway, and never in Dunmanus Bay.

In reply to query 4, he says—

"I do not consider myself sufficiently acquainted so as to form an opinion of the capabilities of these ports. The river Shannon I consider to be of very easy access, being free from danger at its entrance, and deep water close to the shore, which can enable masters of vessels navigating this part of the coast to run boldly for its entrance, *more especially steam-vessels*, as in thick weather they can stand in until they make Loop-head, and once made, enables them to continue their course up the Shannon to a safe anchorage in any weather, where there is plenty of water for the largest ships to ride,—*also I consider the river Shannon to be one of the first ports in Ireland for Transatlantic steam communication*, the upper part of the river affording facility for the building of docks, &c. to any extent."

"Galway harbour or Roads I have had but little experience in, the weather being fine upon the several times I have anchored there, and those for very short periods; I am of opinion that steam vessels once inside the Arran Islands could approach Galway Roads at all times without danger. The roadstead of Galway is open to south-west winds, which causes rather rough riding."

To query 5, he says—

"I have frequently entered and sailed from the Shannon *by night*, both in fine weather and thick dirty weather, snow, squalls, and fogs, but never in a north-west gale, Galway I have entered and sailed from but once, the weather being fine in both instances."

To query 6, he says—

"I do not consider there is any risk in a vessel propelled by steam upon the west coast of Ireland, of a certain tonnage, as I

"presume no vessel would be employed that had not sufficient steam power to make head-way, however bad it might blow, should her position be found contrary to what it was desired."

To query 7, he says—

"In making a voyage from America, in a steam-vessel drawing 19½ feet of water, the river Shannon is the port I would prefer to run for in the winter season."

To query 8, he says—

"In consequence of the approach to the river Shannon being bold, I would stand towards the shore (unless in a dense fog) sufficiently close to make out the Loop Head light. In the day time, in moderately clear weather, the Brandon mountains are an excellent land-mark, being discernible from a great distance. Also the Blasket Islands, they being pretty bold upon the sea side, and the whole of the shore, from the Blaskets to Kerry Head may be approached without danger, as the depth of water will guide you clear of the rocks that lay inside of the Hog Islands, and having made out the entrance of the Shannon you can proceed for Tarbert without delay."

To queries 9 and 10, he says—

"The land I would make in the day would be Loop Head or the Brandon mountains, and at night Loop Head at the Shannon mouth."

Query 11 asks—

"Would you fearlessly in a dark or hazy night, in the depth of winter, in a steam-ship drawing 19½ feet water, in all weathers run for Galway, the Shannon, Valencia, Bantry Bay, or Long Island?"

And his reply is—

"The Shannon, all things considered, I am of opinion is the safest port, having the boldest shore to contend with upon making the land, and no head-lands to round before making the lights, besides having a large clear entrance, which is most desirable for vessels of large draught of water, and of great length."

Query 12 asks, "Would you run for Cork?"—his reply is—

"Under the circumstances I have before stated, I would prefer running for the Shannon in preference to Cork."

Query 13—

“If a steam-vessel’s machinery was out of order, damaged or defective, would it be prudent, in bad weather, to run in the night for either of the ports?”

His reply is—

“Under the circumstances alluded to I should not consider it prudent to run in the night time in bad weather, unless the land had been sighted previously.”

Query 14—

“Under such circumstances in making a run from America, for what port in Ireland would you steer?”

His reply is—

“Under such circumstances I should consider the Shannon the best port to steer for, but it would greatly depend upon the state of the weather, and the direction of the wind; as for instance, should it be blowing a gale from the north-west, attended with dirty thick weather, so that the land or lights could not be seen until the vessel was well in with the shore, I should under these circumstances steer for Cape Clear, or one of the south-western ports, as the water would be smooth under the land, but should the wind be to the south-west the Shannon would be the port.”

The reader may now judge how far he can rely on the mode in which the learned reporter selects his evidence; and he may from thence draw his own inference with respect to the impartiality of this justly-rejected report. We shall proceed to consider the extracts from Mr. Mulvany’s evidence, of which it is announced by the learned author, though the evidence of nautical and naval witnesses must naturally attract attention and deserve respect, he has been greatly influenced in his judgment by the elaborate document prepared and transmitted to the Commissioners by “Mr. Mulvany.” We however must, at the outset, disclaim any such notion as this; for, no matter how ingeniously Mr. Mulvany may have put forward his views—and we quite admit that he has not been sparing of his opinions—still we contend that the case of these ports is emphatically a question that must be decided by nautical opinion, aided by the advice and guidance of experienced harbour engineers and intelligent shipowners, and not by wild and

Utopian railway schemes, such as this witness seems so much disposed to regard, and which can neither supply a safe and commodious haven, such as the Transatlantic service requires, nor obviate the outlying dangers of any port.

We have already adverted to the caution with which this witness's evidence must be received. It is observable that much of his opinions are based upon the Utopian system of railways already described,—railways which would require an amount of expenditure rendering their accomplishment utterly hopeless, and traversing districts wholly disconnected from Galway, and not holding out the most distant hope of even paying their working expenses, much less of providing a suitable dividend. And for this outlay of millions, all that their most sanguine advocate anticipates is an acceleration of about one hour and a half between Belfast and Galway, beyond the existing route from Belfast to Dublin, and thence to Galway or thence to Foynes. The obvious meaning, therefore, of these railways is to divert attention from the true subject of consideration—namely, the selection of the best port for Transatlantic communication. It is precisely in these particulars that this witness's evidence is altogether deficient, conveying no information on the nautical or commercial bearings of the question, and betraying throughout the involuntary leaning by which his opinions are regulated.

In speaking of the equidistance of Galway from the chief towns of England, Scotland, and Ireland, he does not call attention to the fact, that Limerick and Galway are nearly equidistant from Dublin; and as Dublin must be the converging point for all these towns, Limerick is quite as much central as Galway is in reference to Great Britain, and is infinitely more central in reference to Ireland. The Transatlantic Commissioners have clearly described the superior position of Limerick in this particular, as already quoted, having its railway communications radiating in different directions to the north, south, and east—two of them in full operation, and the third advancing rapidly towards its completion.

In speaking of the capabilities of Galway Bay, we are told by Mr. Mulvany that it has from twenty to thirty miles of comparatively sheltered navigation, and that it has

“ numerous adjacent inlets and harbours within itself, or “ near the northern entrance, available in case of need.” We have already, however, a tolerably correct notion of what is to be understood by a “ comparatively sheltered “ navigation,” from the evidence of the naval witnesses whom the learned reporter himself relies on, particularly Lieutenant Turnour, who had so often, in the course of a few weeks, to ride with two anchors, and occasionally to get up steam, for the purpose of relieving the pressure on the anchors whilst riding in Galway Bay ;—and we would here ask this witness in all truth to name the adjacent inlets or harbours near the northern entrance into which a Transatlantic steamer is to escape in case of need ; or would he say that a vessel of this or any other class can approach that shore or enter that channel, during even a moderate breeze, with any hope of escaping inevitable wreck ?—and still more, is there any one of these inlets more than capable of receiving a fishing smack, and that only at high water ? These are questions which an individual of this witness’s position should answer, without dealing in generalities, which are, when tested by direct evidence, so devoid of foundation. “ *Dolus in generalibus versatur,*” is a maxim which was seldom better illustrated.

In order to form a conclusive opinion of the correctness of this evidence, it is only necessary to refer to the pages of the Tidal Harbour Commissioners’ Report of 1845, where the numerous wrecks on this identical part of Galway Bay are enumerated, and which clearly indicate the nature of the entrance at this point. It appears that all the vessels and cargoes mentioned were lost, except three ; and out of these wrecks half the crews were lost.

In short, the coast at this point is beset with sunken reefs and rocks for several miles, and lying on a lee shore, is justly accounted one of the most dangerous parts of the coast of Ireland. The list of wrecks referred to clearly indicates this fact ; and in confirmation, we may add the evidence of Lieutenant Carter, R.N., who, in speaking of Galway Bay, says :—

“ Inside of Arran Islands I have not had much experience, my “ visits therein being confined to a limited number of times during “ the summer months ; but outside of those islands I have had “ more experience, and I know no part of the coast of Ireland more

"difficult to approach or to make than from thence to Slynehead," [the northern headland of Galway Bay.] "The rocks and breakers extend far off the land, whilst the shore of Malbay is both deep and dangerous."

In answer to query 14, he says—

"Galway or Valentia, with a crippled ship, would be quite out of the question."

On the same subject Mr. J. Aylen, Master-Attendant, Sheerness dockyard, who visited all the ports, in speaking of Galway, says, in page 62 :—

"The continued heavy sea setting into this bay, with the wind blowing dead on the shore for eight or nine months in the year, often with heavy gales and thick foggy weather, no master in command would run into this bay without great risk of losing his vessel."

At page 41, he states of Galway, that

"There is a continued swell setting in this dangerous bay of Galway; and in a gale from the south to the south-south-west, there is not a safe anchorage in the bay. It is, therefore, quite unfit for a station of the kind I am speaking of, and is far inferior to either Berehaven or Valentia."

Hereafter the reader will find that this witness speaks most favourably of the Shannon; and from the foregoing account of wrecks at the entrance of Galway Bay, and the evidence of the naval authorities quoted, it will be seen how unwise it would be to accept Mr. Mulvany as our nautical guide. Galway Bay itself could hardly be more unsafe; yet we are ingenuously told by the learned author of the statement before us, that he has been greatly influenced in his judgment by Mr. Mulvany's report; and it is on this account, we presume, that he justifies his disregard of the opinions of nautical men on this nautical question.

In noticing the commercial capabilities of Galway, this witness reminds the reader, that at some remote period that town had a trade with Spain and Portugal. But in tracing the historical events of by-gone times, he altogether forgot to favor us with any means to test the *present state* of commerce in Galway, which, with all due respect for his research, we would far prefer in this inquiry, to any

suggestion or hypothesis of a "considerable trade in former times." When Spain and Portugal led the commerce of Europe, they carried their enterprise to the remotest shores and most obscure ports of the then known world, and no doubt Galway shared in this commerce to the extent of its local wants in common with other ports. Nor was the intercourse with Spain in the days of the Tudors more profitable than it was conducive to the peace and prosperity of Ireland.

We cannot see any connexion between the trade with Spain some centuries ago, and a Transatlantic Packet Station in our day (1852); but we fortunately have in the pages of the Commissioners' Report, page 298, a table of statistical facts, taken from official documents, which gives, on the best authority, the comparative state of the commerce of Limerick and Galway in the present day, from which we quote the following extracts:—

Number and Tonnage of Vessels registered in the Ports, 1849:—

	No.	Tonnage.		No.	Tonnage.
Limerick . .	105	13,834		Galway . . .	22 4,265

Account of Customs in 1850:—

Limerick	£186,044		Galway	£31,435
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Number and Tonnage of Vessels entered and cleared out in 1849:—

LIMERICK.			GALWAY.		
	No.	Tonnage.		No.	Tonnage.
Coastways . .	832	88,334	Coastways . .	122	12,433
Colonies . . .	109	29,949	Colonies . . .	21	5,546
Foreign . . .	498	97,283	Foreign . . .	147	28,579
Total . .	1,439	215,566	Total . .	290	46,548

Duty paid for Tobacco entered for Consumption in 1849:—

Limerick	£107,038		Galway	£11,455
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Coals Imported:—

	Tons.		Tons.	
Limerick	27,816		Galway	6,676

Emigration direct from the Ports, 1849:—

Limerick	11,554		Galway	3,933
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Postage, 1848, 1849, 1850:—

Limerick	£12,938		Galway	£3,274
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Steamers plying to the Port, or on the Navigation:—

LIMERICK.		GALWAY.
Sea-going Steamers	5	
Tidal River Steamers	3	<i>Nil.</i>
Inland Navigation	12	
	<hr/>	
Total	20	

Here, then, we show the amount of customs received in Limerick is sixfold that in Galway; the number of ships entered and cleared out, fivefold; the duty paid on tobacco, tenfold; emigration, threefold; and the number of steamers plying, twentyfold—plainly indicating the superior commercial capabilities of the Shannon: and we may here fairly ask, if Galway was a place of such importance in “former times,” why is it that it has not continued to maintain its position, when the neighbouring port of Limerick has continued to increase as it has done year after year?—Probably the “defects” in Galway Bay, glanced at by our worthy author, will best answer this question, and that the seamen of our days, instead of encountering “the rocks and breakers which extend far off the land,” so graphically described by the nautical witness already quoted, prefer a harbour free from obstruction and danger, and a river port possessing all the elements for carrying on a great commerce.

Without following the author further through his statement, we believe we have given the reader sufficient proof of the unhappy partiality displayed by him for the functions of the advocate, in which he has won so deserved a reputation, in preference to the less brilliant functions of a judge, from which he shrunk. It being clear that Galway is, at present, wanting in the most necessary qualifications for port or harbour, we shall now proceed to consider the means proposed to supply these important deficiencies.

In the first place it is proposed, that in order to afford shelter to the roadstead, (which all the witnesses describe as exposed to a heavy swell, when the wind ranges from south round to west, the prevailing winds on the Irish coast,) it is indispensable that the Mutton Island should be connected with the land by a mole, and that a sea-pier or

breakwater should be carried out for about half a mile, until it reaches the deep water, running in a suitable direction to afford shelter where required.

As regards this plan, it must be kept in mind that vessels such as the Transatlantic steamers, drawing from 19½ to 21 feet, will require, when riding at anchor in an exposed position of this kind, at least 30 feet of water. Without that depth it is obvious there would be no safety during stormy weather; and an inspection of the Admiralty Chart will at once show that the extent of harbour attainable by the construction of the proposed breakwater, will be greatly deficient for any useful purpose as a harbour. But the opinion of the Commissioners themselves seems to set at rest any doubt as to the eligibility of this site for a harbour, or as to the practicability of forming it at all.

At page 11 of their Report, the Bay of Galway is described as—

“Free from tidal influences, and its entrance partially covered by the Arran Islands. But the usual roadstead is nearly twenty-five miles from those islands, and does not afford such shelter from the heavy W. S. W. gales, and the Atlantic sea, for vessels of the size of the Transatlantic mail packets, which draw from nineteen to twenty feet of water, as would enable them to coal, or to land and embark their mails, passengers, and goods, at all times and in any state of the weather.” “From the evidence in the Appendix, it will be seen, that such is the opinion of most of the officers whom we have consulted, and whose knowledge of Galway Bay qualified them to give information on the subject. Lieutenant Turnour, who commanded the ‘Shearwater,’ a steamer drawing only twelve feet of water, at three several periods during which that vessel was at anchor in Galway Roads, states, that on each occasion he was obliged to let go a second anchor, and that the communication with the shore was precarious, owing to the want of sufficient shelter from the wind and sea; and these inconveniences would obviously be more severely felt by vessels of the size and draught of water of the Transatlantic packets. These objections, however, might be met by the construction of a breakwater, connecting Mutton Island with the main-land, and also of one extending from the south-east point of the island, so as to protect the roadstead, and having a landing wharf, along side of which the packets might lie. But consideration must also be given to the possibility that these works might, after a time, owing to the large quantity of

“water which empties itself into that part of the bay, lead to the creation of shoals, and to the silting up of the harbour.”

This gives in very clear and unmistakeable terms, the opinion formed of Galway Bay by the Commissioners, after having considered the large mass of naval evidence they had collected; and in order to arrive at a correct notion of the probability of the silting up here prognosticated, which would amount to its destruction for all purposes of a harbour, it is necessary to describe, that it is into the roadstead that the river which runs from Loughs Corrib and Mask discharges itself, bringing with it all the accumulated supplies of the numerous mountain-rivers flowing from the Connemara mountains, which skirt those loughs. Now, almost every one is aware, that in selecting a site for a harbour, one of the first conditions to be observed is, that no river or stream of any kind shall flow into the space intended to be enclosed as the harbour. At Kingstown, Holyhead, Dover, Portland, &c., at all of which places harbours are now being constructed, not the smallest rill is allowed to enter the harbour, lest that, in course of time, any sedimentary deposit should take place within. The harbour at Dover is a striking illustration of the caution necessary to be observed in this particular, where a difficulty arose respecting the stream that runs into the sea at that place. No less than three successive commissions were organised to examine into this matter, which continued their inquiry over a period of several years, and all the scientific knowledge of England was brought to their aid. Chemists, geologists, philosophers, engineers, naturalists, and seamen, were examined on the subject, and the waters of the locality, both fresh and salt, were analysed and weighed, in order to determine whether it would be safe to have this stream to run into the harbour, or even to discharge immediately outside along the adjoining shore. If such, then, be the necessity of caution in the case of a moderate-sized stream, fed from a comparatively flat district, we may easily foretel what would occur in the case of a large river, bearing the turbid waters of numerous mountain torrents, and hemmed in at the discharging point by the breakwater proposed to be constructed in this case.

But it may be stated, though it has not hitherto been

suggested, that this difficulty might be obviated by forming the harbour farther down the bay. This, however, would be only obviating one difficulty, to encounter others of an equally condemnatory character. The exposure would be infinitely worse, and there would be no possibility of fixing the entrance in a position that would make the harbour accessible when most required. In short, the harbour would be altogether on the wrong side of the bay, where no harbour can ever be constructed to be of any use. At Kingstown, where numerous wrecks have occurred within the harbour, a second inner harbour is now in construction, and on its completion a third is to be commenced. This is on a coast sheltered from the prevailing winds; and what hope then can be entertained that a shelter harbour should ever be constructed in so exposed a locality as Galway is described to be by all these naval authorities? In what has been stated, no mention has been made of the cost or the time of completing these works. Kingstown harbour, which is not yet complete, has cost nearly one million sterling. Holyhead is expected very considerably to exceed that sum. Dover harbour will probably cost two millions; and recollecting that these harbours are on coasts comparatively sheltered, we can readily conceive that the heavy nature of the works that would be required on a shore so exposed as Galway, would involve an outlay of enormous sums, and that many years must elapse before the necessary accommodation would be provided for the packet service. Suitable docks are also an indispensable requisite, which Galway is unprovided with; and taking all these deficiencies into consideration, and the naval opinions quoted, it becomes obvious that probably no locality along the Irish coast presents less nautical facilities for the object in view than Galway. Such must have been the opinion in all previous inquiries on this subject, when Galway was not considered to present any qualification for an object of this nature, and such must be the inevitable conclusion from all the information obtained in the late searching inquiry.

Before closing our remarks on the evidence of Mr. Mulvany, we are desirous to notice his opinions respecting the Shannon. In his evidence he dwells much on the superior capabilities of this great river—its facilities for commerce—its position in the most fertile district in Ireland—its ex-

tensive navigation, connecting itself by means of steam communication throughout the whole interior of Ireland, are all alike extolled. No objection is urged to its seaward approach—its well marked entrance—its unobstructed channel, without shoal, bar, or rock—no want of lights; nor is it alleged by this or any other witness, that the river or port requires any outlay, or a day's delay, to make it available at any moment for a Transatlantic Packet Station.

The reader will, therefore, be much surprised to learn, that with all these admitted natural advantages, unequalled probably in any locality in the kingdom, the only ground upon which a fault is found is the alleged currents in the river, which it appears should condemn it for all purposes of a steam navigation. Now, we should be glad to know where we are to find a river without a current? This fine estuary of one of the greatest of European rivers, condemned because of the ordinary ebb and flow of the tides! Why, if this is to be the grounds of its rejection as a port for steamers, we would ask, what is to become of London, or of Liverpool, or of Glasgow, or of Bristol, or of Hull? This river, having a varying breadth of from three miles near Foynes, to eight miles at its mouth, a distance of forty miles, and its depth from fifty to one hundred and fifty feet, without a shoal or rock, or any obstruction throughout that length, objected to!—without Goodwin Sands, or any shoals such as beset the approach and course of the Thames—without the high-rising tides of the Severn—or the bar of the Mersey—or the shifting sands of the Humber—and yet objected to as a navigable river on such a pretext. In our simplicity, we always thought that the continued ebb and flow of the tide constituted one of the many advantages possessed by a river port in the estimation of every mariner, securing his arrival and departure when the wind failed, which would have left him becalmed in other ports. But, perhaps, in this age of discovery, a new light is to be thrown on this subject, although we cannot refrain from regarding this notion with considerable surprise, and we should consign the witness to no worse fate, than to encounter an honest Londoner after it had been proclaimed, that the ebb and flow of the tide in the Thames destroyed that river for a great channel of intercourse and commerce, and that it ought to be abandoned for Yarmouth, or some

such minor fishing port on the neighbouring coast. In like manner the Mersey, the Severn, the Clyde, are declared to be unfit for the purposes of trade, and to be abandoned by the countless steamers that traverse their tideways—likewise the Hudson, the Delaware, the St. Laurence, and the Mississippi—those great natural canals which in all countries, and through all time, have been established as the great channels of commerce.

Let the millions of inhabitants on the banks of these rivers be told that they and their forefathers have been always under a delusion, in selecting the banks of these rivers for the great seats of commerce, and, doubtless, it will recal to their mind, as it has done to ours, the reply of the worthy Londoners to the monarch, who, attempting to coerce them in some political topic which he was desirous to accomplish, threatened to remove the seat of government, to which they placidly replied, “Your Majesty can, doubtless, remove your court from London, but we defy you to remove the Thames.”

For the last twenty years several river steamers have plied upon the Shannon daily, in all weathers, with and against the tides, from the head of the estuary to near its mouth, and at present several sea-going steamers, plying to London, Glasgow, &c., are traversing the same course, and never has there been heard the smallest objection to a current in the course of this long period, nor the least interruption to the daily trips of these vessels up and down. But, in truth, the objection is too absurd for serious notice. In taking leave of this one-sided statement, which we cannot but regard in every respect, both in its compilation and the mode in which he has put it before the public, as unworthy of its learned author, we must not omit to notice the feverish excitement which has been systematically kept up in the public mind for some months on this important question. We believe that such a course of puffing is eminently calculated to damage the great object, which every well-wisher to the country is anxious to see accomplished on a proper basis; and whilst we are desirous to see the question brought to an early and successful issue, we are not such enthusiasts as to expect that the means and agencies employed will result in anything but discreditable failure, knowing that it is not by

noisy declamation, or garbled documents, that the success of a commercial undertaking, requiring the large capital, well-considered plans, and cool, calculating arrangements of the enterprising trader, will be ensured. Frequently it is asked, why it is we do not find the name of a single capitalist or trader of ordinary position, at the head of, or in any way connected with, the movement in favour of what is called the "Galway Packet Station,"—why it is, that amidst all the clamour, we have not heard of a single fraction being subscribed in that locality, to carry out an object which, after all, must ultimately be established, in a great degree, by local enterprise? But the fact is, by those who could and would embark in the enterprise, the question is looked upon as a mere farce, got up by parties who would be calculated to mar, rather than advance, the object. Let us pause here to recal to mind one or two of the principal incidents in the continually-shifting scenes that have been played off for the entertainment of a too credulous audience. First, we have the experimental trip of the "Viceroy," a vessel chosen, not with reference to her fitness to test an important object of this kind, or presenting in any way a ground of hope of a successful issue. No matter whether she was suited to the quiet waters of the Irish sea, for which she was constructed, or to the swelling waves of the Atlantic Ocean, for which she was so much unfitted, her name had a good sound; it would awaken associations in high places; and although the result in her wreck on the bleak shores of the Newfoundland coast, only confirmed the predictions of every intelligent seaman, we were coolly assured, with characteristic Galway sagacity, that the disaster and failure were more important and satisfactory, than the most successful trip could have been, for it gained notoriety for Galway—and thus the shadow was preferred to the substance. If shipwreck form the evidence and lay the ground of success, most undoubtedly the triumph of Galway over the Shannon is complete!

Then the scene changes to the board-room of the Galway Harbour Commissioners, where the pastor, on trading subjects bent, lays aside his clerical function, and, exchanging the pulpit for the commercial chamber, calls the attention of the astonished and open-mouthed traders

over whom he presides, to the adjoining bay, and appealing, in poetic strains, to the white-crested waves dancing in silvery splendour, as if in pleasing anticipation of the arrival of that foreign craft which was so soon to cleave their waters, he hurls defiance at the British lion, and hoists the eagle with its star and striped flag, as the standard on which he relies for victory.

Again another change, and we are now on the busy quays of New York, where the active citizens observe, with astonished gaze, the announcement of a "Galway Packet." The auspicious day of her sailing arrives; the green flag of Erin floats from her mast; the busy note of preparation is heard; the engine roars in triumphant power, when, lo!—the bubble bursts: for a plodding Dutchman appears, and hoisting the signal for California, the craft steers her course—not for Galway, but for San Francisco's golden shores.

The next scene brings before us an "express train," conveying the youthful and enterprising Wagstaff upon the Irish Midland Railway, with the untiring chairman urging forward the engine and its flying train. A special meeting of the Harbour Board awaits their arrival at Galway, where in due form the "merchant prince" announces his intentions. He and his father are described as owners of a fleet of ocean steamers, to be laid on forthwith for the Galway trade. He, it seems, has examined their bay; he, they are assured, wants no money; his ships are ready; and he only seeks the smiles of the fortunate denizens of the "City of the Tribes." The showers of compliments heaped upon him, by so distinguished and enterprising a commercial body, are more than compensation for his liberal projects. The triumph of free trade and of free exchanges is considered complete. Ireland gives to America her Catherine Hayes, and receives back that great performer, the younger Wagstaff. But, alas! the powers of both performers vanish in air. The new Columbus departs, fully bent upon his great enterprise, when, lo!—the bubble bursts: Wagstaff does not possess a cock-boat, much less a fleet of ocean steamers, and so his part is played, and he quits the stage.

Nor does the exciting drama end here; for, as if to give additional interest to the closing scene, before the curtain

falls, a great lawyer appears, and, in the eager spirit of chivalry which he is determined to display, he thrusts his briefs into his bag, and, casting aside his wig and gown, rushes forth to defend this Galway phantom; but, alas! only to witness its dissolution in the misty clouds of that stormy bay, like those distant islands sometimes seen by the Galway fishermen in the far-off ocean, which are only visible to the eye, but can never be reached. Thus this great farce has been conducted with all the effect of a Bunn or a Calcraft; nor can it be denied that it partakes in ample measure of the dexterity of a Barnum. Yet it is upon this foundation that the great fabric of a packet station, upon which the country have set their hopes, is proposed to be raised. No wonder that it should have been received with the contempt of every right-thinking man; and, in the name of common sense, we implore that this important question may not continue exposed to the derision which such a course is so well calculated to produce and to justify.

We shall now direct our attention to consider the capabilities of the Shannon, our principal object being to adduce such information as has been collected respecting this river, all of which has been carefully excluded from Mr. Whiteside's statement. In doing so, it is not our intention to enlarge on the advantages to be attained in opening a communication between Europe and America by the establishment of a packet station on the west coast of Ireland, this being so clearly and forcibly stated in the report of the Dublin Committee, that its expediency may be regarded as an admitted fact. But should the causes which have hitherto marred its progress, continue to operate against its early consummation, the already successful rivalry of America in ocean steam navigation, and the rapid communication afforded by railways and by the electric telegraph at both sides of the Atlantic, has placed the subject in such a position that the minor interests of localities, or the narrow views of any particular nation, cannot much longer delay the accomplishment of an object so vast in its consequences as already to embrace the interests of the whole family of civilized nations in both hemispheres.

It is only necessary to reflect that Europe is now interlaced with railways, to which will be shortly added a

co-extensive system of electric telegraphic communication, extending to the very confines of Asia, and connecting in one continuous network all her capitals and great cities; whilst North America, leading the way in this most recent of modern improvements, is extending with giant strides the same means of rapid intercourse to the extreme parts of that extensive continent. This gigantic work, unequalled in the world's history, and called into existence during a single generation, only requires that the one ocean link, destined for ever to sever the chain, should be brought within the shortest practical limits. Ireland, near the focus of European industry, and the most western point of its shores, on the one side, and Nova Scotia, also subject to the British crown, presenting in Halifax the best available port in the American continent, on the other, form the two nearest shores of the respective continents; and it cannot be for a moment believed, that anything short of connecting the most direct and nearest accessible points of these two shores, with a perfect system of steam navigation by the shortest voyage, will meet the requirements of the daily increasing intercourse between these two great divisions of the globe. Already has America, ever alive to industrial progress, turned her attention to the accomplishment of this great object, overcoming great difficulties at her side of the Atlantic—leaving to Great Britain the comparatively easy task of its completion at the other; and, however the influence of local interests may, for a time, delay its consummation, the force of events, and the pressing requirements of our progressive and commercial age, will demand at our hands the completion of such an arrangement as will give full effect to the capabilities and facilities for this object presented by the geographical position of Ireland, and will reduce the time required for a passage across the Atlantic, according to the judgment of the eminent engineer, Mr. Penn, of Greenwich, to an average of five days and three quarters!

We are therefore spared the necessity, on the present occasion, of entering into any particulars on the general question, and shall at once proceed to inquire which Irish port is most eligible for the object in view.

On numerous occasions during the foreign wars in which Great Britain has been involved, the superior position of

the south and west coast of Ireland, and the excellence of her harbours for naval and military purposes, has been the subject of anxious consideration. In the last continental war, the late Duke of York and the Duke of Wellington, Lord Beresford, Admiral Beaufort, Sir Howard Douglas, and numerous other high military and naval authorities, expressed their conviction of the great public utility of adopting a point on the west coast of Ireland for a naval rendezvous and the embarkation of troops, as well as for the despatch of intelligence. In despatches and reports, and in evidence given before parliamentary committees, the importance of this measure was dwelt upon, and the successive governors of our North American possessions have continued to urge the importance of quick and direct intelligence between those colonies and the mother country. At that time, however, the exigencies of correspondence and of trade did not appear to require any arrangement of this nature; and it was not until the adoption of railway communication throughout both continents that its commercial and postal importance drew public attention to its utility.

Previous to the introduction of railways into Ireland, their feasibility had been a subject of inquiry, through the medium of a Royal Commission appointed in the year 1838, headed by the late under-secretary Drummond, with Sir John F. Burgoyne and Dr. Griffith as commissioners. In their memorable report, presented to parliament, the subject of a western packet station became one of the chief topics of inquiry; and they went into a very minute examination of the subject, collecting all the information then attainable in respect to the different harbours and the resources of the localities; and although the principles upon which the question then rested have, even in that short space of thirteen years, been very considerably developed, yet the information brought forward as to the position and other particulars of the western ports, as well as the comparative advantages they possess, were so well considered and clearly stated, that they may still be relied on for their correctness. But let it be borne in mind, that railways were then almost in their infancy even in England and America, that Atlantic steam navigation had scarcely arrived at the stage of its first experi-

ment, and its ultimate success was doubted; the wonder-working electric telegraph, "by which thought is communicated with the rapidity, and even with the power of lightning," would then have been thought a chimera. Already the contingencies which were then considered either remote or improbable have been brought into full operation. Railways now connect with Dublin the chief towns of Ireland, and some of its remote shores; the ocean is traversed by numerous steamers, which are daily increasing; the mails are conveyed across the Atlantic with nearly as much regularity as they are transmitted across the land; and the electric telegraph has been brought to such perfection, that intelligence may be transmitted for thousands of miles, with lightning speed, across both continents, and even beneath the ocean. If, then, the subject of a packet station in Ireland was of importance at that period, how much greater is its present necessity.

In considering the capabilities of the different ports, let us bear in mind the position of Ireland, between $5^{\circ} 26''$ and $10^{\circ} 30''$ of west longitude, extending out beyond the general line of the west of Europe, which at once marks it out as the country most eligible for the western point of embarkation for Transatlantic communication between the Old and New Worlds. Its western shores, extending from north latitude $51^{\circ} 24''$ to $55^{\circ} 23''$, present a very irregular outline, being indented by numerous deep bays, bounded by bold promontories jutting out into the Atlantic, many of these having an exposed seaward aspect, without shelter from the heavy roll of the Atlantic, beset with rocks and shoals or presenting inferior anchorage, whilst others are rendered difficult of landward approach by the ranges of lofty mountains which generally characterize the coast of Ireland; all these circumstances at once limit the consideration to a few localities that appear to present conditions necessary for the object under inquiry. Of these the principal ports hitherto suggested are Cork, Berehaven, Valentia, and the Shannon, to which has lately been added Galway, a port which, in all previous inquiries on this subject, it was not thought necessary to notice, but which has of late been pointed out as a locality possessing some qualifications for this object. In the Railway Commissioners' inquiry, the qualifications of the first-

mentioned ports were reviewed with great clearness, and, after balancing the capabilities of all, they came to the conclusion that the Shannon presented the most convenient advantages for this object. Accordingly, after laying out a series of railways radiating from Dublin, and extending to the chief towns in the north and south, they directed a line to Limerick, to be continued to Tarbert, the point on the Shannon selected by them for this object. Following the words of the Report, they state that—

“ The line to Tarbert (on the Shannon) is only thirty-five miles; the country through which it passes is favourable for its construction. The Shannon, as a port, has the advantages of an immediate connexion with the establishments of the influential city of Limerick, and an adjacent district of remarkable abundance and capability, and, moreover, with an inland navigation to Dublin and with the entire navigation of the Shannon.” . . .

Further on, adverting to the fixing of a Government packet station on the west coast of Ireland, the Report states that—

“ Should such a system be judged expedient, we are inclined to believe that perhaps Tarbert might be the most appropriate situation, as uniting the shortest distance, including journey and voyage, the presence of existing large establishments and resources, a favourable port, and a greater extent of railway, well adapted to the purposes of internal communication.”

This appears at once to establish clearly the superior capabilities of the Shannon as compared with other ports; and when it is considered that this inquiry was made with a view to the establishment of railways in Ireland, and not to decide on the comparative merits of particular ports, except so far as it was auxiliary to the primary question placed before the Commissioners, greater weight may be attached to their decision, undisturbed and uninfluenced as they were by the clamorous advocacy of rival ports, a rivalry which did not then exist. The next occasion on which these ports came under inquiry was before the Tidal Harbour Commissioners of 1845. The object of their investigation was to ascertain and record the capabilities of the various ports in the kingdom, their condition and

efficiency, without reference, however, to any particular commercial object. Each of the ports was inspected by one or more of the members of the Commission, who reported the result of actual observations and inquiry. On that occasion the Irish ports were examined by Captain Washington, R.N., Secretary to the Commissioners, from whose report on the river Shannon we take the following extracts :—

“ At the head of the estuary of the Shannon, the noblest river in the United Kingdom, now, by the liberal grants of Government, rendered navigable almost throughout its whole length, and shortly to be connected by railway with Dublin, Cork, Waterford, and Ennis, Limerick occupies an admirable position for Transatlantic trade and commercial enterprise.”

“ The entrance of the Shannon between Loop Head on the north and Kerry Head on the south, is nine miles wide; eight miles higher up the width abruptly contracts to less than two miles, and this may be taken as the average breadth as far as Tarbert, where it is reduced to one mile, whence it gradually decreases up to Limerick, at fifty miles from the sea.”

“ The approach to the river is lighted by a fixed bright light at Loop Head, 269 feet above the level of the sea, and visible twenty miles; a fixed red light at Kilcradaan, 133 feet high; and a fixed bright light at Tarbert Rock, fifty-eight feet high. There are no lights farther up the river; but one is much wanted at Beeves.*

“ The Shannon possesses the great advantage of being easy of access, its entrance being broad, free from dangers, and lying on a parallel of latitude, may be boldly run for. Having made Loop Head, vessels caught in a westerly gale, may fearlessly run for shelter to Carrigaholt Road, or if bound up the river, to Scatterry or Tarbert Road.”

“ Foynes Island, nine miles higher up the river, and twenty miles below Limerick, is about three-quarters of a mile in extent each way, and rises to a height of 200 feet. To the south and south-east of the island, between it and the main land, is an excellent, well-sheltered harbour, of about sixty acres in extent, capable of containing many vessels, in depth from three to six fathoms water, the bottom being stiff mud, the best quality of holding ground. The entrance to the harbour from the north-west is quite clear and deep; that from the north-east is more intricate, and at low water time is only suited to small vessels.

* This deficiency is now supplied, a light-house being since erected at this point in the river.

"Foynes is well situated as a converging point for the traffic of the north-western portion of the county of Limerick, a district rapidly advancing in industry and consequent prosperity. A shipping place for its agricultural produce is much wanted, and Foynes offers every facility for this purpose, in its sheltered anchorage and ample depth of water. It is also in the immediate neighbourhood of the great high road to Limerick, and within three-quarters of a mile of one of the finest limestone quarries in the south of Ireland.

"Hitherto this harbour has been little used, except by stone boats; but there is no place in the Shannon so well adapted for the site of a commercial town; while on the island there are already ready natural docks, requiring but little assistance from art to render them serviceable."

"As the resources of the country are developed, industrial activity must extend along the banks of the Shannon. This great river, draining an area of 4,544 square miles, navigable from the ocean to its source, where it spreads at once into an extensive lake surrounded with coal and turf, affording an abundant supply of fuel, flowing through a district containing some of the most fertile land in Ireland, capable of producing large returns of flax, corn, and cattle; admirably adapted for steam navigation from one end to the other; connected by canals with Dublin and the Eastern coast, and opening to the Atlantic and Western World by a capacious estuary, with roads ample for the largest merchant fleet, offers a combination of natural advantages hardly to be met with in any other part of the country.

"One essential link, however, in the chain is wanting—a sheltered port of easy access, with a floating dock for the security of shipping; this Limerick has not—but this Limerick easily might have, and ought to have, and without it the energy of her merchants is paralysed, and her natural advantages of position are, in a great measure, thrown away."

In his subsequent examination before the Transatlantic Commissioners, this witness fully confirms what is here stated of this "noblest river in the United Kingdom," and it is well to remark, that the only two suggestions he makes in the above extracts as necessary to perfect this port in all its arrangements, are now nearly carried into effect. A light-house has been erected on the "Beeves," a little above Foynes harbour, being the fourth light between this point and the entrance, a distance of about forty miles, which now presents probably the best lighted har-

bour in the kingdom ; a sheltered harbour, easy of access, is completed at Foynes ; and a new floating dock is now erecting at Limerick, of sufficient width of entrance and depth for receiving ocean steamers, as hereafter described.

We now arrive at the period of the Transatlantic Packet Station Commission, which was the first occasion that the capabilities of the Irish ports were made the subject of public inquiry for a specified commercial object ; and adhering to our intention of not entering upon the general principle upon which this question is advocated, which has been so forcibly put forward by the Dublin Committee, as well as in the numerous communications appended to the Transatlantic Commissioners' Report, we proceed to extract portions of the evidence, and more especially that which relates to the nautical opinions on the Shannon and Galway Bay. The information afforded is given in the form of written answers, to a series of queries transmitted to the witnesses by the Commissioners, as well as by oral evidence, and we shall not disturb the order in which they stand in the Appendix to the Report.

Captain Bedford's evidence appears first, but Mr. White-side has extracted all that this witness states in favour of Galway ; and having already supplied some of the omissions in that learned gentleman's extracts, we have put the reader in possession of the principal points in this witness's evidence.

Captain Caffin prefers Cork ; but in his subsequent evidence, page 62, he states that—

“ The Shannon may be run for in any weather, provided you can make out the land, and this you may do (either Brandon Mountains or Loop Head) a long way off. In a westerly or south-westerly gale you get out of the heavy sea, after you pass the Blaskets, and you may either anchor in Carrigaholt Roads for the night, or go up to Tarbert, where you have perfect shelter.”

Captain Hall, R.N., states, as regards the Shannon, that—

“ Cork can be approached at any time, it has a safe anchorage, and all the desired conveniences ; but if it is to benefit Ireland, I would strongly recommend Tarbert, in the river Shannon, as a

“safe and good anchorage. The mouth of the Shannon being about five leagues broad, with regular soundings, the communication by sea is at all times thus rendered comparatively easy.

“The soundings extend in that parallel of latitude about 100 miles off—forming a safe direction for making the land; in order to carry on the communication by land, it would only require a railway from Tarbert to Limerick, which, from what I know of the country in that locality, could be formed at a comparatively trifling expense, and the result might be that twenty hours time would be sufficient to travel from Tarbert to London.

“As to commerce, the canal from Limerick to Dublin, gives another advantage for this point as well as the various branches from the Shannon. In departing from the Shannon, a steamer would be, as it were, out of the thoroughfare of vessels crossing the Atlantic, which in foggy weather is of great consequence.”

And as regards Galway, this witness adds that—

“Galway is totally unfit, in its present state, for the object intended; a heavy sea always sets into the bay with a westerly gale, and the anchorage is bad.”

Lieutenant Church, R.N., probably one of the best informed officers in the Navy, as regards the Irish coast, having been thirteen years frequenting it, is next examined. Vice-Admiral Pigot speaks of Lieutenant Church in the following terms in a letter addressed to the Commissioners:—

“I would also bring under the notice of your Lordship, and of the Commissioners, a very indefatigable and talented officer, having much experience of the coast from Cork to the Shannon, Lieutenant Church, of the surveying service, who assisted materially in surveying the harbour and port of Cork; and I considered him while I held the command, an officer possessing much sound information upon subjects having reference to the Irish coast.”

The opinion of this witness, possessed of such great practical experience of the Irish coast, is entirely favourable; his knowledge extends from Cork round to the Shannon, though not to Galway. Of the Shannon he states—

“The approach to the Shannon is considered good. In coming

“from the westward and south-westward, the Blasket Islands (especially the Tiraught Rock) and Brandon Mountain (3127 feet high) make an excellent landfall in day time; a light placed on the Foze Rock, if practicable, would be of great service; if practicable it might be placed on the Tiraught, which, in some respects as regards the approach to the Shannon, might be a more advantageous position; as kept just open, north of the Northern Blasket, called Innistooskort, it would take a ship clear of the Brandon land, and lead up in the direction of Loop Head light and the fair way of the Shannon.”

“On a near approach to the entrance of the Shannon, Loop Head, with its light, will be a fine object to run for; and I consider that there are no circumstances of bad weather, after making the light, to prevent a steamer boldly running up the entrance, as the light on Kilcradaan Point will soon come into view. Any danger that exists (Kistiffeen Bank, four fathoms, breaks heavily in winter gales) may be avoided whilst these lights are in sight, by the guidance of the Admiralty Chart; and the same may be said of the passage from Kilcradaan Point up to the Tarbert Light.”

“The shoal extending from the south shore, called Beal Bar, has been regarded as a danger, and sailing vessels have been wrecked thereon, but it cannot be considered as lying in the way of a well conducted steamer; and ‘the narrows’ between Rinana shoal, off Scatterry Island, and Carrig Island shoal, on the south side, is sufficiently wide for the largest steamer, directed by a light in advance and rear.”

“The tides run very strong, from outside Kilcradaan Point up to Tarbert, and require study and attention; but with the aid of the lights, Admiralty Chart, and local knowledge, the nocturnal approach to Tarbert is, in my estimation, sufficiently safe.”

“On making Loop Head light, I consider that running for the entrance of the Shannon, in a *heavy winter gale at night*, is a safer undertaking than running for any of the previously mentioned places, except Cork, because under such circumstances, space of entrance and a straight course, are of great value, with a towering Atlantic sea following. Immediately on passing the gorge of the Shannon at Kilcradaan Point, very fair anchorage may be had, if necessary, at Carrigaholt.”

“Not being acquainted with the navigation of Liverpool, I cannot compare these harbours with it; but judging from its fixtures as shewn in the chart, and by what experience I have had of St. George’s Channel, as compared with the west coast of Ireland, I should say that if the entrance of Liverpool were situated where

"these western harbours are, that it would be approachable only in the finest possible weather; and I, moreover, consider that any of these harbours, were they in the English Channel, would be considered safe and of great value."

"The exit from any of them must be considered always safe with a powerful steamer, in any weather in which head-way could be made, if outside."

"Bound to Tarbert, the first light to make would be Loop Head; next, that in Kilcradaan Point; and finally, the light at Tarbert Point. In day light the Blaskets and Brandon Mountain would first be sighted."

"At *none* of the other harbours could repairs be had for boilers or machinery; nor could shipwrights' repairs be had, *except in the Shannon*, and in a very small degree, at Berehaven."

"There is but little Welsh coal brought to the Shannon; Scotch coal is chiefly used; they prefer that from Troon, which is used in the steamers that ply on the Shannon. I am told that the average price of Scotch coal through the year, in the Shannon, is about 13s. to 14s. per ton."

"There are many pilots belonging to the Shannon; but they are chiefly to be found between Tarbert and Limerick. There are, however, some 'western pilots,' who live at Kilbaha, about three miles east of Loop Head, inside the mouth of the Shannon; they keep a look-out for vessels that make signal for pilots, and rise *canoes* made of canvas stretched over a frame-work of ash, and will launch and go to sea in weather in which no ordinary boat of wood could live."

The evidence of Lieutenant Turnour, R.N., has already been very fully given, who points out so strikingly the various occasions on which he was obliged to put out second anchors in Galway Bay, and to get up steam to relieve the strain upon the anchors, alluding also to the necessity of erecting a breakwater to shelter that harbour.

Inspecting Commander B. Quadling prefers Valentia, but does not appear to have any knowledge of the Shannon or Galway.

Inspecting Commander Lieutenant Hungerford prefers Berehaven, but does not appear to know Galway or the Shannon.

Inspecting Commander Kemble knows only Galway from personal inspection; refers to the necessity of the breakwater to shelter the anchorage, and states that the probable cost would be £180,000.

Inspecting Commander Pasco states of the Shannon, that "there is no difficulty in making the coast, and there are no rocks or shoals to prevent a vessel drawing 19½ feet water coming in." This witness appears to know nothing of Galway.

Inspecting Commander Hoare can give no opinion except as regards Cork, and recommends that port for the Packet Station.

Captain Sir Edward Belcher knows nothing of the Irish ports.

Vice-Admiral Pigot is only partially acquainted with the south coast of Ireland, and not at all with the west coast.

Captain Bevis, R.N., prefers Cork, but does not appear to have any knowledge of the other ports. He disapproves altogether of an Irish Packet Station.

Mr. Jonathan Aylen, Master-Attendant, Sheerness Dockyard, who has had a long experience of all the Irish ports, states—

"I beg leave to send you my opinion as to which is the best port for a packet station on the south and west coast of Ireland. I have frequently heard this subject discussed, and have had my attention principally called to *five* of the Irish ports, viz., Berehaven, Valencia, the River Shannon, Galway, and Queenstown."

Of the Shannon he states—

"This port may be run for in perfect safety, as the entrance is wide and clear, and the soundings shoal gradually in to opposite Kilcadrane point; and in thick weather, if unwilling to run, can anchor either in Carrigaholt Bay or in Scatterry Roads. Tarbert, I think, is the best station for a railway terminus. If I take a point in the Atlantic, in the true course from America, from which to measure the time it would take to reach Dublin, the one steamer going to Valentia, and the other by the Shannon, I find by completing the *railway* from *Limerick to Tarbert*, I can be there within one hour as soon as it would take to reach the same place by Valentia; and in the one case I have only a small piece of *railway* to complete going through Limerick, one of the largest trading towns in Ireland; and in the other I have more than *four* times as much to make, through one of the *wildest* and less frequented parts of the kingdom. With respect to the anchorage at Tarbert, which has been objected to, I have not observed it to be

"at all a bad one, nor do I think the race at Tarbert a serious objection to its becoming a flourishing port. Docks might easily be constructed there, and vessels drawing 14 feet can go up to Limerick and there be refitted or repaired. Docks on a large scale are now in course of construction at Limerick, to meet the requirements of the existing trade, and I can scarcely think that the gaining of an hour or two in a voyage to Dublin would, in a national point of view, counterbalance the immense advantages of the River Shannon over Valentia harbour. However, in speaking of this south-west coast of Ireland, I beg leave to remark that a light is wanted on the Forze Rock, near the Blaskets; in no place in Ireland do I think one so necessary; it would not in my opinion be difficult to erect, and would be very beneficial to those bound to or from the River Shannon."

Of Galway he states that—

"There is a continual swell setting in the dangerous Bay of Galway; and in a gale from the south to the W. S. W., there is not a safe anchorage in the bay; it is therefore, quite unfit for a station of the kind I am speaking of, and is far inferior to either Berehaven or Valentia."

Captain Hon. E. Plunkett, R.N., states of the Shannon, that—

"The Shannon is easy of entrance, but the adjacent coast (Mal-bay) dangerous.*

"Galway is good and easy of access, but small in the part suited to large ships. A considerable space could be gained by running out a short groyne or breakwater."

5. "I frequently sailed from and into Tarbert and Galway under various circumstances. All *these ports* might easily be sailed from in moderately clear nights, but not *entered* by large ships coming home unless sighted before dark."

The witness considers the west coast of Ireland as

"Very dangerous; the sea being heavy and breaking at great depths, the gales violent and lasting, the soundings so irregular as to be useless, and thick weather very prevalent."

The witness would prefer Cork "to any western port."

* This coast, it should be remembered, is north of the Shannon, and the dangers noticed by Captain Plunkett lie consequently on the passage to Galway.

8. "Galway Bay is easily entered and easily distinguished by day or night, the Arran Isles, with their excellent light, pointing it out; but Cork has the great advantage of not being on a dead lee shore with the prevailing winds, and having the St. George's, the Bristol or the English Channel, open."

Captain Lowe, R.N., "knows all the ports, and prefers Cork to all the rest."

Captain Fisher, R.N., knows nearly all the ports; was in and out of Tarbert, Galway, and Cork frequently, and under all circumstances of fine and foul weather. In answer to a further question, he states that—

"In making a voyage from America, in a steam-vessel drawing nineteen and a-half feet water, the Shannon is the port he would prefer running for in the winter season, being easy of access, and having good anchorage between Loop Head and Tarbert, should circumstances render it necessary."

When asked what headland he would try to make by day or night in making a voyage from America, his answer is, "Loop Head by day, and Loop Head light-house by night."

The following question is then put:—

"Could you, fearlessly, in a dark or foggy night, in the depth of winter, in a steam-ship drawing nineteen and a-half feet water, in all weathers, run for Galway, the Shannon, Valentia, Bantry Bay, or Long Island?"

"I would not, as a general rule, run for any port under such circumstances; but if I had previously obtained good observations, I should not hesitate to run for the Shannon. I would run also for Cork, but not by preference."

The following important question was subsequently put:—

"If a steam-vessel's machinery was out of order, damaged, or defective, in bad weather, and at night, what port in Ireland would you run for, in making a run from America?"

The answer is conclusive—"The river Shannon."

Captain Driver, R.N., knows all the ports, and was in them on many occasions; he gives the preference to Valentia. He states—

"That at Tarbert, a very indifferent anchorage, the tides run very strong; I have drove there with seventy fathoms chain outside the hawse, not from the force of the wind, but owing to the velocity of the tides."

"Galway is an open roadstead, unsafe in the winter months, and not adapted, under any circumstances, for a Western Packet Station."

In answer to a further question, he states, that—

"In the event of damage to the machinery, he would not run for Galway, it being an open roadstead, and not affording shelter. I would run for the Shannon if the weather was so clear as to make out the light on Loop Head."

Lieut. A. R. Dunlop, R.N.—

"Was in Tarbert thirty or forty times—Galway, about twenty times."

"Cork, Galway, and Tarbert are the easiest of access at night, and the safest harbours to run for in thick weather."

In answer to the question, which port he would run for, he states he would "run for Galway or the Shannon."

In answer to the question—"Would you, fearlessly, in a dark or hazy night in the depth of winter, in a steamship drawing nineteen and a-half feet water, in all weathers, run for Galway, the Shannon, Valentia, Bantry Bay, or Long Island?"—he replies, "I would run for the Shannon, there being no danger whatever in the entrance."

In the case of disabled machinery at night, he states—

"That it would be quite prudent to run for the Shannon, being perfectly clear of all dangers until Carrigaholt's anchorage is passed, which roadstead has good anchorage, and protection from all westerly winds; or Tarbert Light, on a proper bearing, will clear all dangers."

"Galway is also a good port to run for, being well lighted."

Captain Brown, R.N., prefers Cork, and objects to both Galway and the Shannon.

Jonathan Aylen, Master-Attendant, Sheerness Dockyard, is thoroughly acquainted with the whole of the south and west coast. He says—

"Tarbert is a good anchorage, and the best on this part of the coast, and fit for a Packet Station."

"Galway.—The docks are good; but the continual heavy sea setting into this bay, with the wind blowing dead on the shore for eight or nine months in the year, often with heavy gales and thick foggy weather; no master in command could run into this bay without great risk of losing his vessel."

Lieutenant Ladd, R.N., who frequented all the ports but Galway, states—

"I found the Cove of Cork accessible at all times of tide for vessels of any class, and the channel being well buoyed off up to Haulbowline Island, admits its being called the largest and best port on the *south side* of Ireland; but being so, is evidently too far way from the nearest which Transatlantic packets ought to make on their way from America to the western division of the kingdom.

"The entrance to the River Shannon from Kerry Head to Loop Head, is wide, deep, and bold to, well up the harbour light-house, and being the nearest port (with deep-water clear entry) to America, accessible to large vessels at any time of tide, with good anchorage at Carrigaholt, Scatterry, and Tarbert, it seems the best place thereabouts for a Transatlantic Packet Station.

"Having left her Majesty's packet 'Zephyr,' when that vessel went on to Galway with meal, I am unable to give an opinion as to its capabilities in every respect for a Transatlantic Packet Station, further than by an 'Atlas Chart' and 'Coasting Pilot' book now before me, and from which the approaches thereto appear difficult to navigate, while water in sheltered places is shallow."

When asked—

"In making a voyage from America, in a steam-vessel drawing nineteen and a-half feet water, which of the ports would you prefer running for in the winter season?"

He replies—

"If not directed to a particular port, I should steer for Cape Clear, and go on to Cork, as water is generally more smooth on the south-east side at that season of the year; otherwise (in a powerful steam-vessel in good order) I might as well shorten my distance 180 miles, and run for the Shannon."

To query 11—

"Would you fearlessly, in a dark or hazy night, in the depth of winter, in a steam-ship drawing nineteen and a-half feet water, in

"all weathers, run for Galway, the Shannon, Valentia, Bantry Bay, or Long Island?"

His answer is—

"The Shannon; the approach thereto being deep and wide, lofty land, bold to, with a chance of making use of the Loop Head and harbour lights towards an anchorage."

12. "Would you run for Cork in the case above-named, and bound for the Shannon, with machinery in good order?" "No, seeing no good reason for extending the voyage."

Commander Bower, R.N.—In reply to query 7, this witness states—

"That in the winter season he would prefer running into the Shannon before any of the other ports."

11. "In a dark or hazy night, in the depth of winter, in all weathers, would you run for the Shannon in preference to Galway, Valentia, Bantry Bay, or Long Island?" "I would boldly run for the Shannon. The others, as far as my experience goes, certainly not."

14. "In case of damaged or defective machinery, for what port in Ireland would you steer in making a run from America?" "For the Shannon."

Lieutenant G. T. C. Smith, R.N., states of the Shannon—

"Tarbert, with good moorings, might be made a first-rate anchorage, and it is a capital port. The only objection is the strong eddies which run there."

And of Galway, he says—

"Galway is more a roadstead than a harbour for a larger vessel, and requires much care in approaching; and, in my opinion, is less preferable than any of the foregoing ports."

He states that in making a voyage from America—

"I would prefer, first, the Shannon; second, Valentia. I give the preference to the Shannon, because Loop Head is a good head-land, and bold close-to, and is easily made out by the lighthouse on it. After passing which, Kilcradaan lighthouse guides you safely to its entrance, and the navigation from thence to Tarbert is easy."

D

He adds—

11. "Provided I was sure of the reckoning of the vessel I commanded, I should not fear running for either the Shannon, Valentia, or Berehaven; but I should not like to try Galway in a vessel drawing so much water."

12. "Would you run for Cork?" "No, not in preference. It would depend *entirely* on the defect in the machinery. Of course it would not be wise to risk a lee-shore, if the defect was of such a nature as to be likely to cause a break-down, if necessary to keep off-shore against a strong gale."

14. "In the case of disabled machinery, which port would you steer for?" "It would depend on the wind and state of the weather. I know no safer port to run for on the north and west coasts of Ireland than Killybegs, Blacksod Bay, or the Shannon."

Lieutenant Goss, R.N., states—

"Galway is too dangerous: the Shannon I have no experience of it."

Commander Kelly, R.N., states that

"Galway is a spacious, fine bay, about thirty miles deep, with the Islands of Arran acting as a natural breakwater, and three good clear channels for ingress and egress, and has a good roadstead inside of Mutton Island (or Galway Roads), with good holding ground and sufficient water."

He considers the coast of Ireland

"Dangerous and hazardous; does not know the Shannon except from having heve-to at its mouth; considers the west coast of Ireland very 'hazardous and dangerous' in the winter season; prefers Cork to any other port."

Commander Pearce

"Prefers Valentia to any other port; does not know Galway. I consider the coast, from the Shannon to Cork, far less dangerous than the east coast of England."

Mr. William Randall

"Has traded to the west coast of Ireland, almost without intermission, for thirteen years in command—six winters on the south-south-west and west, seven winters trading to Limerick exclusively. During the period of years and number of times which I have passed in and out of the Shannon, it will readily be supposed that I have encountered every variety of danger or difficulty,

“whether arising from storms, heavy seas, thick weather by rain, mist, fog, or snow, prevailing winds or cross currents; and, comparing this river with any other which I have seen or read of, whether considered in its qualifications and capabilities; as capable of ingress and egress; a harbour of safety and refuge, with excellent anchorages along both shores; navigable at low water for line-of-battle ships; and free from any danger or obstruction for forty-five miles to within fifteen miles of the city of Limerick; and with a tidal navigation for ships drawing twenty-three feet of water to the quays and docks of the city; and for all purposes whatever—naval, military, or mercantile—as a river, port, and harbour, I look upon it as the safest and best that can be found.”

For the purposes and objects of a Transatlantic packet-station, it is impossible to conceive any position more naturally advantageous than the Shannon, for these reasons:

“First—The Blasket Islands are the nearest Irish land to the American continent.

“Second—The object should be to reach the nearest land, and the nearest safe port having railway communication with Dublin.

“Third—The course of the voyage from America is the same, or nearly so, as the course from the Blaskets to the Shannon, and up the river.

“Fourth—The Blasket Islands being lofty, long, and narrow, and terminating at the sharp point to the west, steep too on all sides, do not hold fog or mists so much as any line of coast land, and may be safely approached in all weathers, and with all winds. The Skellig Rocks, which bear south-south-west of the Blaskets, and only fifteen miles distant, are of similar formation, and upon these latter are two lights. Between the Blaskets and Skelligs is the Foze, a tidal rock over which the sea always breaks, and which is likewise bold all round.

“These are all unmistakeable indications of position, even in thick weather; and if the weather be clear the Brandon Mountains (the highest coast land in the United Kingdom, and only twelve miles east of the Blaskets) may be seen above fifty miles from seaward. When any of these are clearly made out, the chain of land-falls is so continuous, the distance so short, and the entrance to the Shannon so wide, that mistake under any circumstances is clearly impossible. In this I speak with the greatest confidence, because I have had frequent opportunities of practical results. Indeed I have several times, under adverse circumstances, being driven as far as the 14th degree of west longitude, and have therefore been placed in a precisely similar situation as if making a voyage from

"America, and I have never experienced any delay or difficulty in making the land or reaching the Shannon."

"Galway Bay, across which the Arran Islands extend, lies at the bottom of a deep and dangerous bay called Mal Bay; Loop Head on the south, and Slyne Head on the north, being distant from each other nearly 100 miles, form the two extreme points of this deep bay, and of which the Arran Islands are nearly in the centre. The whole coast of Loop Head to the entrance of Galway Bay, a distance of over forty miles, is extremely dangerous, offering no place of safety or refuge for vessels, and scarcely one where, in case of emergency, life may be saved. The coast between Slyne Head and the north entrance presents some places of refuge, but the whole length is so dotted and beset with rocks and islands that it must always be dangerous for large vessels, and to persons not thoroughly acquainted with the locality, no seaman in his senses would, I think, run down into this deep bay, unless the weather was extremely fine and clear, or that he had previously made the Blaskets or Loop Head; for to suppose that the lead will mark out the ship's position, after having run a distance of 2,000 miles, without a previous knowledge of her latitude, is utterly fallacious.

"The south entrance of Galway Bay or Sound is less than one half the width of the entrance to the Shannon, with only one sunken rock in the way; this is the channel generally used by vessels coming from the westward, and the distance from this to the roadstead off Mutton Island is something over 20 miles; vessels drawing 18 feet of water must ride with the bay fully open, and will therefore be exposed to this long drift with westerly winds.

"With the wind between west and south-south-west, this roadstead will also be very rough; when blowing hard, no communication whatever can be had with the town of Galway, which is nearly two miles distant, dead to leeward; and the dock for ships of this description is perfectly useless, having only fourteen feet at its entrance; in fact, the natural disadvantages of Galway for a Transatlantic Packet Station, are in an inverse ratio about equal to the advantages of the Shannon for the same purpose; I have resided the greater part of two years in Galway, and make this statement without fear of contradiction."

"In a dark hazy night in the depth of winter, in all weathers, I would fearlessly run for the Shannon in preference to Galway, Valentia, Bantry Bay, or Long Island."

Query 14. In case of a disabled ship, "I would decidedly steer for the Shannon."

Mr. M. O'Connell, M.P. "prefers Valentia to any other port," but he gives no opinion respecting Galway or the Shannon.

Commander Burke, R.N. states, that—

"Tarbert is safe of approach; would require to be improved to afford accommodation for a Packet Station; at Foynes Island, about seven miles further up the Shannon, a safe harbour could in my opinion be made for vessels drawing $19\frac{1}{2}$ feet of water."*

"Galway is sheltered from the Atlantic swell by the Arran Islands; bold to run for; at present it has not accommodation for vessels drawing $19\frac{1}{2}$ feet of water. By running out a pier from the south side of Mutton Island, and filling up the sound between it and the main, which dries at low water, a safe harbour could be made for a packet station. Running for this harbour, avoid two shoals up the bay near the harbour. On the Black Rock, close to the north shore, there is a beacon. The second spring shoal about E.S.E. from the former, distant two miles, which has from 16 to 18 feet of water on it the lowest spring tides. Between these shoals is a safe passage for ships to work through."

M. Smith, Esq., Commander of R. C. "Chance," was twenty-eight years on the Irish Coast, and about fifteen years on the south-west and west coast; he states—

"I have frequently been in and out of all the harbours named; in making a voyage from America would prefer running to the Shannon, to any other port, it being the nearest port except Valentia, for which I should feel hesitation in running in thick hazy weather."

"I would fearlessly run," he adds, "for these ports in a dark or hazy night, in the depth of winter, in all weathers. I would without hesitation run for Galway, were there a light on the Skird rocks, or on Brannach Island; but would prefer the Shannon were Loop Head light discernible."

In answer to query 14, "In the case of a disabled ship what port would you steer for?"—"Under such circumstances I would run for the Shannon."

Lieutenant Broad, R.N., states—

"The river Shannon I consider to be of very easy access, being free from danger at its entrance, and deep water close to the shore, which can enable masters of vessels navigating this part of the coast to run boldly for its entrance, more especially steam-

* The Harbour of Foynes is now completed.

"vessels, as in thick weather they can stand in until they make Loop Head, which once made, enables them to continue their course up the Shannon to a safe anchorage in any weather, where there is plenty of water for the largest ships to ride."

"I consider the river Shannon to be one of the first ports in Ireland for Transatlantic steam communication, the upper part of the river affording facility for the building of docks, &c., to any extent."*

"Galway harbour or roads, I have had but little experience in, the weather being fine upon the several times I have anchored there, and those for very short periods. I am of opinion that steam-vessels once inside the Arran Islands could approach Galway roads at all times without danger. The roadstead of Galway is open to south-west winds, which causes rather rough riding."

6. "I do not consider there is any risk in a vessel propelled by steam upon the west coast of Ireland, of a certain tonnage, as I presume no vessel would be employed that had not sufficient steam power to make head-way, however bad it might blow, should her position be found contrary to what it was desired."

7. "In making a voyage from America in a steam-vessel drawing $19\frac{1}{2}$ feet water, which of the ports would you prefer running for in the winter season." Answer, "I should prefer the river Shannon."

8. "In consequence of the approach of the river Shannon being bold, I could stand towards the shore (unless in a dense fog) sufficiently close to make out the Loop Head light; in the day time, in moderately clear weather, the Brandon Mountains are an excellent landmark, being discernible from a great distance. Also the Blasket Islands, they being pretty bold upon the sea side, and the whole of the shore from the Blaskets to Kerry Head, may be approached without danger, as the depth of water will guide you clear of the rocks that lay inside of the Hog Islands; and having made out the entrance of the Shannon, you can proceed for Tarbert without delay.

"In a dark and hazy night, in the depth of winter, and in a steamer drawing $19\frac{1}{2}$ feet, I would run for the Shannon; all things considered, I am of opinion it is the safest port, having the boldest shore to contend with upon making the land, and no headlands to round before making the lights, and besides having a large clear entrance, which is most desirable for vessels of large draught of water, and of great length."

"Under the circumstances I have before stated, I would prefer running for the Shannon in preference to Cork."

"Under such circumstances I should consider the Shannon the

* These docks have since been constructed at Limerick.

“best port to steer for, but it would greatly depend upon the state of the weather and the direction of the wind; as for instance, should it be blowing a gale from the north-west, attended with dirty thick weather, so that the land or lights could not be seen until the vessel was well in with the shore, I should under these circumstances steer for Cape Clear or one of the south western ports, as the water would be smooth under the land; but should the wind be to the south-west, the Shannon would be the port.”

Commander Hutchinson, R.N., describes—

“Galway as one of the finest bays and most safe harbours; I consider it, from long observation and practical experience, and the localities attached, to be most desirable, for the following reason: it must ever prove beneficial for a public establishment in saving the lives of hundreds, and to the mercantile world, I have no hesitation in asserting, it would be of the most invaluable and greatest possible advantage in preserving both ships and property, being the nearest and most safe in approach for the Atlantic, and avoiding that most dangerous part of the Irish Channel, approach safe by day or night, at all times of tide or wind, by good navigators.”

“In making a voyage from America would prefer ‘Galway decidedly,’—and in a dark or hazy night in the depth of winter, in all weathers, would fearlessly run for Galway;—and in the case of a disabled ship, would steer most certainly for the first and safest, which I certainly believe Galway to be, from my constant personal observations and experience during the above seven years and a half.”

Knows nothing of the Shannon except Tarbert, which he “visited in a gun brig on duty.”

Captain Hanley, R.N.—

“Galway Road possesses good holding ground, but is open to winds between W. and S. and S. E. The ports of Cork, Berehaven, and Long Island are excellent.”

“Galway Bay might be run for provided the Arran light could be seen at a moderate distance. The Shannon might be run for, but it would be advisable to make the land about Brandon Head, from whence a safe course could be shaped between Kerry and Loop Heads.”

This witness does not appear to have ever been in the Shannon, but has been in Cork and Galway.

This concludes the extracts from the nautical evidence, embracing a list of no less than forty-nine naval witnesses who have given their opinions on the subject of the harbours of Ireland; out of these Mr. Whiteside has quoted nine naval officers in support of his selection of Galway; but we have already shown that four of these have stated their preference for other ports for this object;—so that, out of the whole number of forty-nine naval authorities, he can only find five who prefer Galway for a packet station; and even these show that, in its present condition, that locality cannot be made available for the purpose. In extracting the evidence of these officers—and we have omitted none that are the least important out of the whole number—we have allowed them to speak in their own words as to the capabilities of the Shannon and Galway, without any comment whatever from us; and we leave it to the judgment of every reader, and even to the candid opinion of Mr. Whiteside himself, whether, after this most searching investigation, the decision in all previous inquiries on this subject, in selecting the Shannon as the best port, has not been fully confirmed.

The questions which these officers were called upon to answer, placed the nautical capabilities of the ports in the most adverse circumstances possible—"in a dark or hazy night, in the depth of winter, in all weathers," and with a large steam-ship having her machinery disabled; and yet, under all these disadvantageous circumstances, the Shannon is pronounced by the great majority of them as possessing greatly superior capabilities compared to all the other ports. In short, it would be rare to find a port anywhere upon which so favourable a judgment could be pronounced; and whilst all these witnesses point to the exposed and unsheltered state of the roadstead of Galway, and to the necessity of extensive works to fit it for this object, the ready accessibility of the Shannon, and the excellent shelter of its various roadsteads, are forcibly described, requiring no outlay, or involving no delay, to make it at once available for a packet station. It will be observed, the only objection that occurs throughout the different replies refers to the tidal current in the anchorage of Tarbert—but this is only one out of many roadsteads in the Shannon, and not the one proposed for the packet station. Tarbert roads are

situated at an angle in the river, which causes the tide in some degree to set upon them; but this occurs only at ebb tide, and the river being about two miles wide at this part, the tide occasions no real inconvenience at any time in the navigation; and, notwithstanding the run of tide that does occur, Tarbert, from its excellent shelter, was the rendezvous for the distribution of supplies, both winter and summer, for her Majesty's steamers during the years of distress, and sailing vessels frequenting the river always lie there when waiting for a favourable wind. This anchorage lies on the south side of the river, and is accordingly sheltered from all the prevailing winds which set from the south and south-west.* Lower down on the north side is the anchorage of Carrigaholt, so favorably mentioned by the naval authorities already quoted, near to which is the roadstead of Scatterry Island, affording an excellent anchorage in the centre of the river. Likewise, on the north side, above Tarbert, is the anchorage of Labasheeda, after which we reach Foynes harbour on the south side; and above this again, on the same side, the roadstead of Beigh Castle—all these presenting a succession of roadsteads on alternate sides of the river, which are available for shelter from whatever direction the wind may blow. In short, the Shannon has been well described by one of the highest of these naval authorities—"It is all harbour: you may anchor anywhere there on the river;" for the sixty miles in length of its estuary, with numerous roadsteads available for all winds, and having Foynes harbour as a large natural floating dock, available at all times of tide. Any one of these roadsteads is better than Galway, presenting much better shelter, and requiring less expenditure to make them much superior harbours. Tarbert is admirably sheltered from all the winds that make Galway so much exposed, and is only objected to on account of the run of tide; but as it has but a small stream flowing into it, which might easily be diverted, a moderate expenditure would render it a much better harbour than Galway can ever be, and it lies, besides, considerably westward of Galway. The superior shelter of Foynes, however, from every wind, gives

* Tarbert is also the Customs' boarding station for the port of Limerick, where all vessels, inward and outward bound, come to, to be boarded, in all weathers.

it the advantage, and it has therefore been selected as the proper point for the packet station.

We shall here make a few extracts to show the capabilities of the harbour of Foynes.* Commander Triphook states—

“ Nothing to prevent a steamer from passing Tarbert in the darkest night, and running up to Foynes harbour, which can be entered at any time of tide in the darkest night. It is capable of containing eight or ten first-class steamers in its present state, where they would have six to eight fathoms water, muddy bottom. The harbour of Foynes might be made one of the most beautiful docks or basins in the world, and would then contain as many, if not more, vessels than the Southampton docks, which could be done at less expense than in most places, as the materials are of the best and finest description and all on the spot.

“ Vessels can stop in the anchorage, outside the island, in from ten to twelve fathoms water.

“ The harbour of Foynes stands on the south side of the river Shannon, and is formed by the island of that name on the north, and the main-land of the county Limerick on the south: it is sheltered from all winds; has an eastern and western entrance.”

Captain Washington, R.N., Tidal Harbour Commissioner, states, in his oral evidence before the Packet-station Commissioners—

“ Once inside the island, Foynes is an admirable little harbour, and so sheltered from winds as to be equal to a floating dock of thirty acres in extent, with depth for the largest steamers at low water of spring tides.”

Barry D. Gibbons, Harbour Engineer to the Board of Works in Ireland, states—

“ The harbour of Foynes affords ample depth of water for the largest ships in the royal navy, drawing upwards of 19½ feet, with the utmost facility of access day or night, and complete shelter, being masked on all sides by high lands. Adjoining the harbour of Foynes a most substantial pier, formed with heavy dressed ashlar, has been lately completed, having 456 lineal feet of wharfage, besides an inclined plane 240 feet in length. Alongside the wharf and pierhead the depth of water will be, at low

* It should be borne in mind that this evidence refers for the most part to a time anterior to the construction of Foynes harbour.

“ water, ten feet, with sixteen feet rise of tide, and the bottom consists of a soft alluvial deposit; but the water deepens so quickly outside the pierhead, that a small piled and framed jetty in extension of it would enable vessels drawing twenty-four feet water to come alongside at the lowest tide. The cost of this, executed in the best manner, would be under £1,000. The pier is sufficiently wide to admit of the railway coming alongside a steamer at the “ jetty head.”

And in the evidence of Dr. Griffith, Chairman of the Board of Works in Ireland, we have it stated—

“ The harbour of Foynes is sheltered from all winds, and vessels could now lie at anchor in twenty-two feet water at low water spring tides. A pier has been completed, and it has ten feet water at low water spring tides; but by means of the construction of a wooden platform, on piles, a timber jetty in addition to the pier, which would cost about £1,000, you could have nineteen feet water at low water spring tides.

“ There are other ports in the Shannon, but there are none of them so easily available as Foynes. Tarbert is more seaward, and capable of being made a much larger harbour than Foynes.

“ I apprehend that Foynes is perfect: it is not exposed to any winds.”

It appears, therefore, that it is only necessary to make a landing stage at this point to perfect it as a harbour for ocean steamers. This would be the work only of a few days.

At Beigh Castle, a few miles above Foynes, the deep water navigation may be said to terminate, which anchorage is about forty-five miles above the mouth of the river, and is accessible for the largest vessels at all times of tide. From thence to Limerick, a distance of about sixteen miles, is a tidal navigation, navigable at high water the same as the Thames up to London, the Mersey to Liverpool, the Severn at Bristol, and the Clyde from Greenock to Glasgow. The tide rises about twenty feet, affording a channel of twenty-eight feet in depth at spring tides, and twenty-three feet at neaps. There are a few rocky obstructions in the channel, but with deep water alongside, and they are now in course of removal. At Limerick there is extensive quayage accommodation, and a floating dock is in course of construction, which will be completed in a few months: it is seven acres and a half in extent, and built

of the superior limestone raised on the site of the works. The depth was intended to be twenty-two feet at springs and seventeen feet at neaps; but by a late arrangement, the depth has been increased to twenty-five feet at springs and twenty feet at neaps. In like manner the entrance is to be increased from fifty feet to seventy feet, so that this dock will be suited to receive ocean steamers.

Annexed is a tabular statement of the depths of the docks at Liverpool, Limerick, and Galway :—

Tide.	Liverpool Atlantic Dock (Coburg.)		Limerick New Dock.		Galway Dock.	
	ft.	in.	ft.	in.	ft.	in.
Average high water springs .	23	3	23	4	16	0
Equinoctial spring tides . .	25	0	25	2	—	—
Average high water neaps . .	16	2	18	8	12	0
Highest neap tides	18	9	19	11	—	—
Lowest neap tides	14	2	17	5	—	—

It is rare to find such excellent depths as those are at Limerick, being superior to those at Liverpool; and the inferior depths at Galway will be observed by this comparative table, which verifies the insufficient nature of the dock and port at that place, as described by several of the nautical witnesses.

Above Limerick the Shannon extends 150 miles more up through the heart of Ireland; and, added to sixty miles, the length of its estuary, gives a total length of 210 miles. It intersects the country nearly for its whole length, and is traversed by numerous steamers from end to end; it is, moreover, connected with Dublin by two canals, each nearly 100 miles in length, and a new canal is advancing towards completion, near its source, to connect with the large northern lakes (Erne and Neagh), and thus uniting this great river with all the navigations in Ireland,—presenting an unbroken chain of navigable waters of over 800 miles in length; interlacing the whole of the island, and communicating with the sea at seven different points around the coast—namely, at Dublin, Newry, Belfast, Coleraine, Ballyshannon, Limerick, and Waterford. This network of inland navigation touches or intersects twenty-six out of

the thirty-two counties of Ireland, and has an immediate connexion with forty-nine towns exceeding a population of 1,000.

The following table shows the comparative capabilities of Limerick and Galway in these particulars:—

Length of Navigation.

	Miles.		Miles.
The Shannon ...	210	Loughs Corrib and Mask	40
Other Navigations in connexion ...	605	0
Total	815	Total	40

Number and Population of adjoining Counties.

THE SHANNON.		GALWAY.	
	Population.		Population.
11 Counties ...	2,444,691	2 Counties ...	617,612

Number and Population of other Counties in connexion by means of other Navigations.

18 Counties ...	4,465,898	2 Counties ...	617,612
29 ...	6,910,589	2 ...	617,612

Water Power, according to Sir Robert Kane.

	Horse Power.		Horse Power.
The Shannon, exclusive of its tributaries ...	38,667	Loughs Corrib and Mask ...	6,850

Towns in immediate connexion with Navigation having a Population of over 1,000.

THE SHANNON.		GALWAY.	
	Population		Population
49 Towns, Population	507,913	2 Towns ...	35,724

Relative Value of Land in adjoining Counties.

The Shannon ...	£3,320,610	Galway ...	£736,832
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Limerick stands fourth among the towns of Ireland, ranking next after Dublin, Belfast, and Cork. It contains a population of 55,268 inhabitants within the borough, according to the census of 1851; is governed municipally.

by a mayor and corporation; it has a chamber of commerce, incorporated by royal charter, banks of the highest credit, several literary societies, and public hospitals for the sick. It contains, also, not only the docks and quays already noticed, but establishments where any repairs required for shipping may be commanded at all times. The number of steamers now frequenting the port will also ensure the repairs of machinery.

There can be no truer criterion of the capabilities of the Shannon than is afforded by these tables, and it only remains to notice the mineral products and other resources along its course.

The position of Limerick, at the head of a capacious estuary sixty miles in the interior, surrounded by a proverbially rich and fertile district, and with an extensive inland steam navigation extending through the heart of the island for a distance of 210 miles from the sea, and having branching navigations throughout the whole of the interior, combines natural advantages which will always confer on this city an importance superior to all other localities in Ireland, except the metropolis. Few districts in any country have been more favoured by the hand of nature, and with the varied mineral productions that are to be found along its course, and the enormous water-power so well concentrated within convenient reach, its ultimate high position as a large seat of manufacturing industry, appears placed beyond a doubt. These resources are, however, to a considerable extent, still without development; and any measure tending in any degree to awaken these latent elements of an extensive industry, would confer benefits on the country at large to an extent that cannot be easily estimated. At the head of the Shannon there is the Arigna iron and coal district, remarkable for the richness and productiveness of its iron clay beds, having abundance of coal associated with it. The coal is bituminous, and some mines have been opened, and are still worked; but turf fuel being so abundant, coals are very little used. From Lough Allen, where the Shannon takes its source, and around which these iron and coal mines extend, the river flows southward through the heart of the country to Limerick, expanding in its course into several lakes of great extent, and washing the

shores of eleven counties; the country on either side affording in numerous localities various mineral productions. Copper, lead, iron, sulphur, alum, marble of various hues, coal, pottery clay, flooring flags, roofing slates, &c. are among the products throughout the counties of Clare, Tipperary, Kerry, and Limerick, in several parts in which mines are worked by joint-stock companies. Likewise, on both banks of the estuary below Limerick is an extensive development of coal strata, (said to be one of the largest coal fields in the kingdom,) the peculiar qualities of which are not as yet so well understood as to secure its extensive use where other coal can be obtained; but when circumstances arise, from the exhaustion of turf fuel, which will produce a more extended demand for coal, it may be reasonably expected that so large a source of industry and wealth will not long remain dormant.

Enough has been stated to show the varied resources throughout the course of the river, and to complete the description, the water power which it provides must not be overlooked. Sir Robert Kane remarks on this subject, that "the Shannon—that great river, which, penetrating the interior of Ireland, navigable from the ocean to its source, rising in one coal formation, emptying itself through another, and washing the banks of our most fertile counties—delivers into the sea the rain collected from an area of 3,613 square miles of country." He estimates the discharge as giving "a force existing between Limerick and Lough Allen equal to 38,667 horse power, supposed to be in constant action."

It has been truly remarked, that Ireland not only possesses the largest river in the British islands, but that no island in the world possesses so great or so well circumstanced a river, or a river for its extent so vast in its resources. In addition to its mineral products and water power, the richness of the land in the districts around Limerick has long been proverbial. The large annual exports of corn and butter to England and Scotland, previous to the famine, being the largest exports of these products from Ireland, furnish ample evidence of its fertility and productiveness.

It has been urged that Galway possesses superior water power, which this measure would be highly calculated to

bring into operation for manufacturing purposes ; but if this is to be a test for this object, and we quite admit its importance, we have shown that this water power has been estimated by a high authority at 6,850 horse power, whilst that of the Shannon is set down at 38,667 horse power, nearly the whole of which is to be found within a distance of about twelve miles, between Limerick and Killaloe, in the immediate vicinity of Limerick. Besides, the unrivalled fertility of Limerick just stated, renders it highly suitable for meeting the demands of a large manufacturing population, whilst at Galway the district at one side consists of extensive mountain ranges, remarkable alike for their sterility and grandeur, and on the other side extend wide plains of rocky sheep-tracts, only capable of supporting a scanty population.

In a subject of national importance, like that under consideration, the naval and military facilities which the locality possesses, become a question of some consideration, and in this respect no locality presents superior advantages. The central position of the city of Limerick, together with its great facilities for extended intercourse, have rendered it invariably an important military position and station for troops. The agricultural productiveness of the surrounding country must always ensure ample supplies for both services ; and the railways to Cork, Waterford, and Dublin, with the steam navigation of the Shannon above and below Limerick, afford the readiest and most direct means of moving, and concentrating in large and commodious barracks, a large force from the other military stations in all parts of the empire, as well as for the safe and rapid dispatch of troops to all parts of the interior, or their immediate transport to sea, for colonial or foreign service.

In like manner, the same facilities afford commercial advantages of a superior kind, especially in connexion with inland communications, so advantageous for distributing foreign products and the produce of manufactures through the interior.

But however important are these considerations, we repeat that this question must be tested and decided mainly on its nautical bearings, coupled with its internal communication with all parts of the empire. On these grounds the superior capabilities of the Shannon are undeniable.

Viewing then this question in its imperial bearing, the Shannon presents advantages and facilities for the intended object, not to be found in any other harbour along the western coast. According to the unqualified testimony of numerous naval authorities, its entrance is in every way well situated and circumstanced for safety and readiness of approach in all weathers, by day or night, and its tideway affords various convenient and well sheltered anchorages, with numerous lights along its course, and Foynes as a capacious floating dock, sheltered from every wind. Its port is in a due westerly direction from the nearest English ports and from the British Capital, and occupies a most advantageous position for internal intercourse, having a first-rate dock and extensive warehousing accommodation, and presenting a central point of radiation for a two-fold line of direct communication, for railway transit and telegraphic intelligence, to all parts of Great Britain, and the northern and central districts of Ireland, with a third line of railway to the south of Ireland, and a steam navigation through the heart of the interior; whilst in regard to local considerations, it presents all the advantages for the support of the large establishments required in an improving commercial city—a most extensive development of mineral productions, especially coal, the chief element of steam power, and a vast water power in its “falls”—combining all the elements required for manufacturing industry on a large scale, which the establishment of an Atlantic Packet Station would tend naturally to develop.

With the continued intercourse of travellers passing from one hemisphere to another, the attention of capitalists could not fail to be directed to these great resources, so well circumstanced and conveniently situated; and, in looking forward to the attainment of that great destiny which has been predicted for Ireland, to become the “mart of Europe for the trade of America, for which she is so well suited by her western situation, immediately open to the ocean, and accessible almost with every wind,” no other locality along our western seaboard can more justly claim for itself the possession of these advantages than the city of Limerick, where, in the words of that distinguished writer, Sir Robert Kane—

“There is no doubt but that the greatest development of activity and wealth should be towards the west, and especially along the

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“ districts of the Shannon. Let us conceive that river, forming at its source, 250 miles from the sea, an extensive lake, surrounded with coal and turf and the richest iron stone, then cutting through a district containing some of the most fertile land in Ireland, capable of producing the largest returns of flax, corn, and cattle, presenting an alternative of lake and river, fitted for steam navigation from end to end, and in one locality within the distance of four miles, affording water power for mechanical manufactures on the greatest scale. In the hills, a few miles only from the seat of mechanical power, are mines of lead, of copper, and of sulphur, of slate and marbles. Again, this great line of navigation is placed in immediate access to the eastern coast by two canals, and may be brought into contact with the north by a canal to Lough Erne and Neagh.* Finally, it possesses a capacious port and estuary, superior to that of the Thames, and roadsteads capable of giving certain accommodation to the most extensive navy.

“ Those natural facilities, of which no such combination exists in any other part of the country, promise to render, at some future time, the Shannon the line of industrial activity in Ireland. Of that line Limerick, if not dethroned by some more active competition, may be the key. It is a future upon which every Irishman must look with deepfelt interest, and with the hope that the people may, by morality, by steadiness, and intelligence, show themselves worthy of the benefits that have been placed thus within their grasp, and may be found competent to apply in the proper manner.”

We admit, however, that this subject must be previously viewed in reference to imperial considerations, without regard of the local advantages, which may be created or increased. The practical question is, whether the acceleration of the correspondence between Europe and America, by reducing the sea voyage across the Atlantic to five days and three-quarters, is not an object of inestimable value to the trade of the Old World and the New? No interests of private companies, no influence of private individuals should be suffered to weigh in a matter of such importance. The elements of progress on which we have dwelt in comparing the Shannon with Galway, are as yet only in their infancy, and the wide field which modern science has opened to us in quick intercourse and rapid communication, (especially by the electric telegraph,) has as yet been hardly engrafted among our institutions. We

* The Government, seeing the importance of this junction canal, have granted funds for its construction, and it is now nearly completed.

are as yet in the dark as to the extent to which these appliances may lead, so that it behoves the country to look a-head, and to avoid all contracted views in this matter. We are bound for the sake of our trade to take advantage of all the geographical facilities the country possesses, before the time comes when, compelled by the force of events, we shall be driven to the adoption of more enlarged views of our own interests. We may at that period regret opportunities lost, duties neglected, adverse establishments created, and a formidable adverse interest called into being, against which it may be difficult to contend.

Hitherto the interests of other maritime ports, and the supineness or indifference of the legislature, have deterred the public from duly considering or appreciating the extreme importance of selecting the most westerly Packet Station on the coast, and securing the shortest and safest passage across the Atlantic. The rapid strides of trade of late years, and the unexampled tide of emigration which has arisen, and still continues increasing, together with the consequent requirements of quick interchange, and the certainty of an immediate prospect of a transmarine telegraphic communication between England and Ireland, have awakened public attention to the subject, leaving no doubt of a practical result. The selection of the most desirable port is therefore one of the chief objects now to be considered, and the inquiries of the late Royal Commission having reduced the competition to that between two ports, of the Shannon and Galway, it only remains to determine which of them presents the greatest amount of advantages for the object to be attained.

The conclusive evidence appended to the Commissioners' report affords ample means of arriving at correct results, and points out the Shannon as in all respects the most desirable port, as possessing superior nautical capabilities, and the advantages of a well sheltered harbour and port, with suitable dock accommodation; and all the elements of success and progress arising out of the resources of an improving commercial city, and capable of being at once made available for this object; whilst Galway is as clearly proved to be without a harbour for the purpose, or a port or dock accessible for vessels of the class of ocean steamers. But should any doubt still exist as to the superior suitability of the Shannon for this object, it

only remains to appoint a competent tribunal to decide the question between the two ports to which the inquiry is now limited. For this object let a Government Commission be issued, consisting of a high naval officer, a commander of one of the ocean steamers, with one of our experienced harbour engineers; let the evidence of the numerous naval witnesses already examined on this subject be laid before these authorities—above all, let them visit both these ports in one of her Majesty's steamers, in winter as well as in summer; and after personally inspecting each port, let a report be drawn up by them, specifying the nature and extent of the works necessary in each case to provide a suitable haven, with the required accommodation, and specifying the practicability, the estimated cost, and probable time necessary for their completion. By such a course this question would be finally settled, and the general project being no longer retarded by doubtful opinion, all difficulties would be removed, and the Government enabled to take the necessary steps for realizing for the empire, and indeed for the world, the many advantages of the safest and the most rapid Transatlantic communication.

We are more than willing to abide by the result of a fair and impartial inquiry, and the deliberate judgment of independent and intelligent men. This is at least a proof of our sincerity and our confidence in the justice of our cause, notwithstanding the report of Mr. Whiteside, and the commercial name and enterprise of Wagstaff.

Limerick, February, 1852.

POSTSCRIPT.—The very favourable evidence of the numerous naval authorities given in the foregoing paper, as to the nautical facilities of the Shannon, both for approach and departure, in all weathers, has been practically tested and most fully confirmed during the present winter, by the new screw steamers, of comparatively small power, belonging to the Limerick Steam-Ship Company, which have made their voyages between Limerick and London, encountering the Atlantic waves in the most severe gales, without the slightest interruption of their regular weekly trips.



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